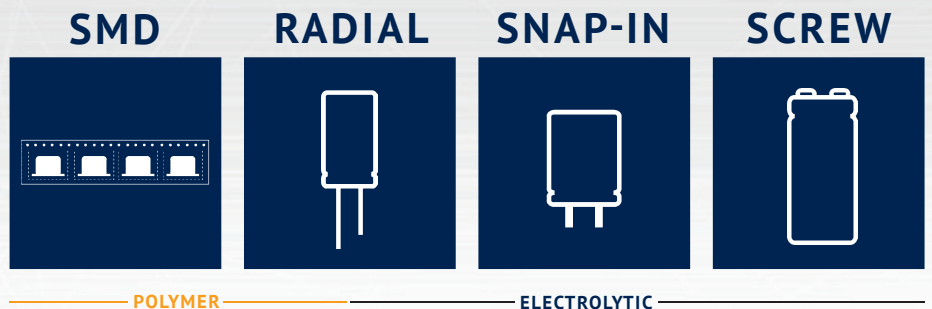




ALUMINUM ELECTROLYTIC CAPACITORS

2022/2023



ENGINEERED SOLUTIONS

JIANGHAI EUROPE
Electronic Components GmbH

Capacitors from Jianghai

JIANGHAI EUROPE ELECTRONIC COMPONENTS GMBH IS THE EUROPEAN SALES ORGANIZATION OF NANTONG JIANGHAI CAPACITOR CO., LTD., NANTONG (CHINA). SINCE 2004, SALES, MARKETING, TECHNICAL SUPPORT, CUSTOMER SERVICE TEAM AND WAREHOUSE OF JIANGHAI EUROPE ELECTRONIC COMPONENTS GMBH ARE LOCATED IN KREFELD AND KEMPEN (GERMANY).

» ELECTROLYTIC CAPACITORS

Jianghai has grown since its foundation in 1958 to become the largest Chinese manufacturer of aluminum capacitors generating revenues of more than 700 million USD in 2021. While Jianghai started in the beginning with the production of specialty chemicals (e.g., electrolyte solutions), it entered the production of aluminum electrolytic capacitors already in 1970.



» INTEGRATION OF PREMATERIAL

More recently, Jianghai extended its production range by integrating high and low voltage anode foil etching and forming facilities. All factories are located in mainland China: the most important ones are in Nantong (north to Shanghai), in Inner Mongolia, and in Xi'An area. Jianghai is well prepared for further expansion due to its successful entrance to the stock market in summer 2010.

» FILM CAPACITORS

In 2012, the product portfolio was complemented by a range of power film capacitors. For this new business unit, Jianghai also follows the strategy of vertical integration and thus the production will extend from the preparation of the plastic film to the assembly of the finished goods. The product portfolio of DC-Link and Snubber capacitors has been enlarged in the year 2016 by AC-film and Safety capacitors. Highly automated production facilities ensure the efficient mass production of film capacitor Modules. Driven by the thriving electric vehicle market in China, Jianghai has attained a leading position for the supply of these customer specific components.



» POLYMER CAPACITORS

The year 2013 was marked by a major breakthrough in R&D for polymer aluminum electrolytic capacitors: the voltage proof for these ultra-low ESR products was pushed out to as much as 200V, enabling the utilization of these advanced capacitors in more applications, e.g. in white goods, industrial automation, telecom infrastructure, power supplies, and LED ballasts. Hybrid and

Stacked (Chip) Polymer Capacitors were added into the product portfolio in the year 2019.

» ENERGY CAPACITORS

For energy storage applications, Jianghai has developed a range of Lithium Ion-Capacitors (Li-C) based on the well-known EDLC technology.



Li-C combine the advantage of many hundred thousand charge and discharge cycles and high energy density, allowing for a wide range of applications in energy storage and recuperation. Jianghai offers EDLC as well as Li-C in various form factors, e.g. in radial, snap-in, pouch or module shape.

» CAPACITOR COMPETENCE CENTER

Global presence of experienced sales and technical marketing experts at offices in Europe, Asia and the Americas ensure the local support of our customers based on sound know-how in all project phases. In 2014 Jianghai Europe has established an additional service for its customers in Europe: Experts for capacitors are awaiting telephone calls or emails at the CCCenter as a kind of hotline for all kind of technical requests.

» CUSTOMIZED PRODUCTS

Jianghai's particular strength as a volume manufacturer is to offer customized products. Jianghai focuses on the demanding professional industrial segment with many power electronics applications. Research and development in collaboration with several specialized university institutes as well as the access to all vital pre-materials enable Jianghai to create engineered, customized solutions to fit smoothly into a specific application. Jianghai is continuously improving processes, thereby enhancing the quality of its products and services. The list of certificates awarded to Jianghai reflects its level of achievement. In the year 2013, the Jianghai Europe sales office has become certified according to ISO9001 and ISO14001.

» CONTACT

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| CD 110 | PT | Radial | 85°C | 6,3-500V | 4 000h | Standard | 18 |
| CD 11GL | GL | Radial | 125°C | 160-450V | 6 000h | High Temperature, High Voltage | 21 |
| CD 261 | LK | Radial | 105°C | 160-450V | 14 000h | High Voltage, Long Life | 23 |
| CD 261L UPDATED | DE | Radial | 105°C | 160-450V | 14 000h | Miniaturized | 25 |
| CD 261X | QX | Radial | 105°C | 160-550V | 12 000h | High Voltage, Highest Currents | 28 |
| CD 263 | BK | Radial | 105°C | 6,3-500V | 3 000h | Standard | 30 |
| CD 269 | PH | Radial | 125°C | 10-63V | 4 000h | High Temperature | 34 |
| CD 269L | HL | Radial | 125°C | 10-100V | 10 000h | High Temperature, Long Life | 36 |
| CD 281 | LL | Radial | 105°C | 6,3-100V | 12 000h | Low ESR, Long Life | 38 |
| CD 281L | LH | Radial | 105°C | 6,3-100V | 12 000h | Low ESR, Longest Life | 43 |
| CD 282L | YL | Radial | 105°C | 6,3-100V | 12 000h | High Current, Ultra Low ESR | 48 |
| CD 282X | EQ | Radial | 105°C | 6,3-100V | 12 000h | High Current, Miniaturized | 53 |
| CD 284 | XY | Radial | 105°C | 6,3-100V | 10 000h | High Current, Ultra Low ESR | 56 |
| CD 284L | LY | Radial | 105°C | 6,3-100V | 12 000h | Miniaturized | 60 |
| CD 285 | HY | Radial | 105°C | 6,3-100V | 12 000h | Highest Current | 64 |
| CD 287 | GC | Radial | 105°C | 6,3-100V | 10 000h | Low ESR | 68 |
| CD 28L | QL | Radial | 105°C | 6,3-63V | 14 000h | Low ESR, Miniaturized | 73 |

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SERIES SNAP-IN

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| CD 293 | BZ | Snap-In | 85°C | 10-500V | 4 000h | Standard | 82 |
| CD 294 | BW | Snap-In | 105°C | 16-550V | 4 000h | Standard | 86 |
| CD 295 | BC | Snap-In | 85°C | 10-500V | 6 000h | Long Life | 90 |
| CD 295S | BS | Snap-In | 85°C (105°C) | 160-500V | 12 000h | 12 000h, Enlarged Temperature | 94 |
| CD 296 | KC | Snap-In | 105°C | 16-550V | 5 000h | Long Life | 96 |
| CD 296L | FL | Snap-In | 105°C | 350-500V | 6 000h | Large Size 105°C | 100 |
| CD 297 | BB | Snap-In | 105°C | 10-500V | 7 000h | Longer Life, High Current | 102 |
| CD 299 | PG | Snap-In | 105°C | 160-500V | 9 000h | 9 000h, High Current | 106 |
| CD 29C | QC | Snap-In | 105°C | 200-450V | 4 000h | Miniaturized 105°C | 109 |
| CD 29D | HR | Snap-In | 85°C | 160-450V | 7 000h | Long Life, Highest Currents | 111 |
| CD 29H | QH | Snap-In | 105°C | 160-450V | 5 000h | Long Life, Highest Currents | 113 |
| CD 29HD | QF | Snap-In | 105°C | 200-450V | 8 000h | Outstanding Ripple Current | 116 |
| CD 29L | QL | Snap-In | 85°C | 16-500V | 7 000h | Long Life, Large Size | 118 |
| CD 29U | CU | Snap-In | 85°C | 575-630V | 6 000h | 575V, 600V, 630V | 121 |
| CD 29UH | UT | Snap-In | 105°C | 575V, 600V | 6 000h | 575V, 600V at 105°C | 123 |
| CD 840 | ZQ | Snap-In | 85°C | 200-450V | 10 000h | 10 000h High Current | 125 |
| CD 891 | ZJ | Snap-In | 85°C | 35-500V | 4 000h | Miniaturized | 127 |
| CD 892 | ZL | Snap-In | 105°C | 400-500V | 5 000h | Miniaturized, Long Life | 130 |
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SERIES SCREW

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| CD 135 | BP | Screw | 85°C | 10-500V | 4 000h | Standard | 141 |
| CD 136 | PK | Screw | 105°C | 25-450V | 4 000h | Standard | 144 |
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| CD 137S | PR | Screw | 85°C | 350-500V | 12 000h | Miniaturized, Prolonged Lifetime | 148 |
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| CD 138S | WP | Screw | 85°C | 350-500V | 15 000h | Longest Life, Highest Currents | 152 |
| CD 139 | BL | Screw | 105°C | 350-450V | 9 000h | Longest Life | 154 |
| CD 139S | HC | Screw | 105°C | 350-450V | 9 000h | Longest Life 105°C, High Current | 156 |
| CD 13H UPDATED | BH | Screw | 85°C | 600-650V | 4 000h | 600V, 650V | 158 |
| CD 838 | ZT | Screw | 85°C | 350-450V | 10 000h | Miniaturized, Long Life | 160 |

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■ SMD 170

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|--------|----|-----|-------|---------|--------|-------------------------|---------|
| PC HVC | VC | SMD | 105°C | 2,5-25V | 2 000h | Standard | 170 ff. |
| PC HVF | VF | SMD | 105°C | 16-200V | 3 000h | Full Voltage | 170 ff. |
| PC HVG | VG | SMD | 125°C | 2,5-20V | 1 000h | High Temperature | 170 ff. |
| PC HVK | VK | SMD | 125°C | 16-80V | 2 000h | Enlarged Voltage, 125°C | 170 ff. |
| PC HVM | VM | SMD | 105°C | 2,5-16V | 2 000h | Low ESR | 170 ff. |
| PC HVS | SV | SMD | 105°C | 4-25V | 5 000h | Long Life | 170 ff. |
| PC HVX | VX | SMD | 105°C | 2,5-10V | 2 000h | Ultra Low ESR | 170 ff. |

■ RADIAL 176

| | | | | | | | |
|---------|----|--------|-------|---------|--------|---------------------|---------|
| PC HCN | CN | Radial | 105°C | 2,5-25V | 2 000h | Standard | 176 ff. |
| PC HCS | CS | Radial | 105°C | 2,5-16V | 5 000h | Longest Life | 176 ff. |
| PC HEG | EG | Radial | 105°C | 16-63V | 2 000h | Larger Case Sizes | 176 ff. |
| PC HEL | EL | Radial | 105°C | 2,5-16V | 2 000h | Ultra Low ESR | 176 ff. |
| PC HEN | EN | Radial | 105°C | 2,5-25V | 2 000h | Standard | 176 ff. |
| PC HGN | GN | Radial | 125°C | 4-25V | 1 000h | High Temperature | 176 ff. |
| PC HPF | PF | Radial | 105°C | 16-200V | 3 000h | Full Voltage, 125°C | 176 ff. |
| PC HPK | PK | Radial | 125°C | 16-80V | 2 000h | Enlarged Voltage | 176 ff. |
| PC HPN | HN | Radial | 105°C | 2,5-16V | 2 000h | Ultra Low ESR | 176 ff. |
| PC HPNA | NA | Radial | 105°C | 2,5-16V | 2 000h | Ultra Low ESR | 176 ff. |
| PC HSN | SN | Radial | 105°C | 2,5-25V | 2 000h | Standard | 176 ff. |

■ STACKED CHIP 183

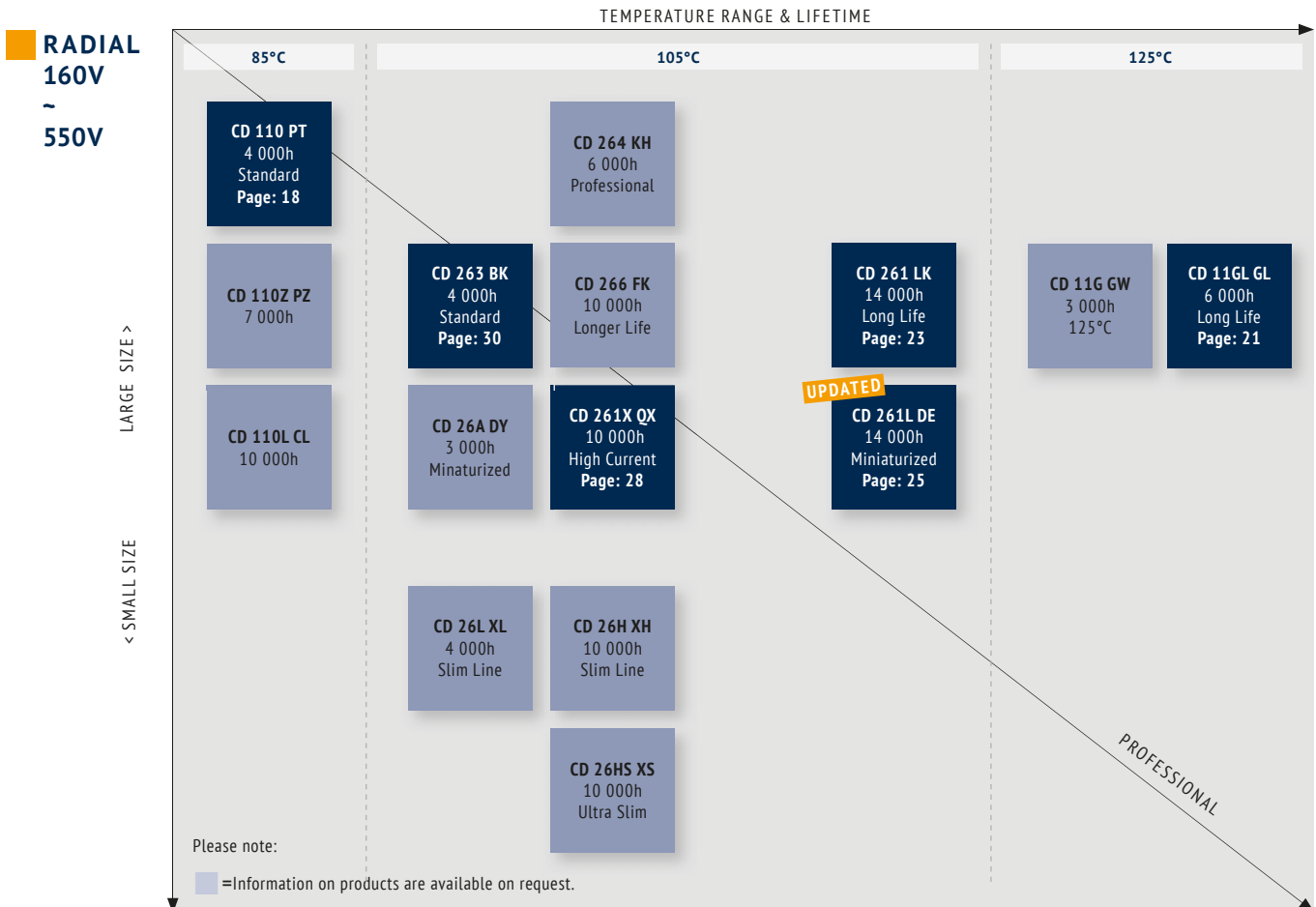
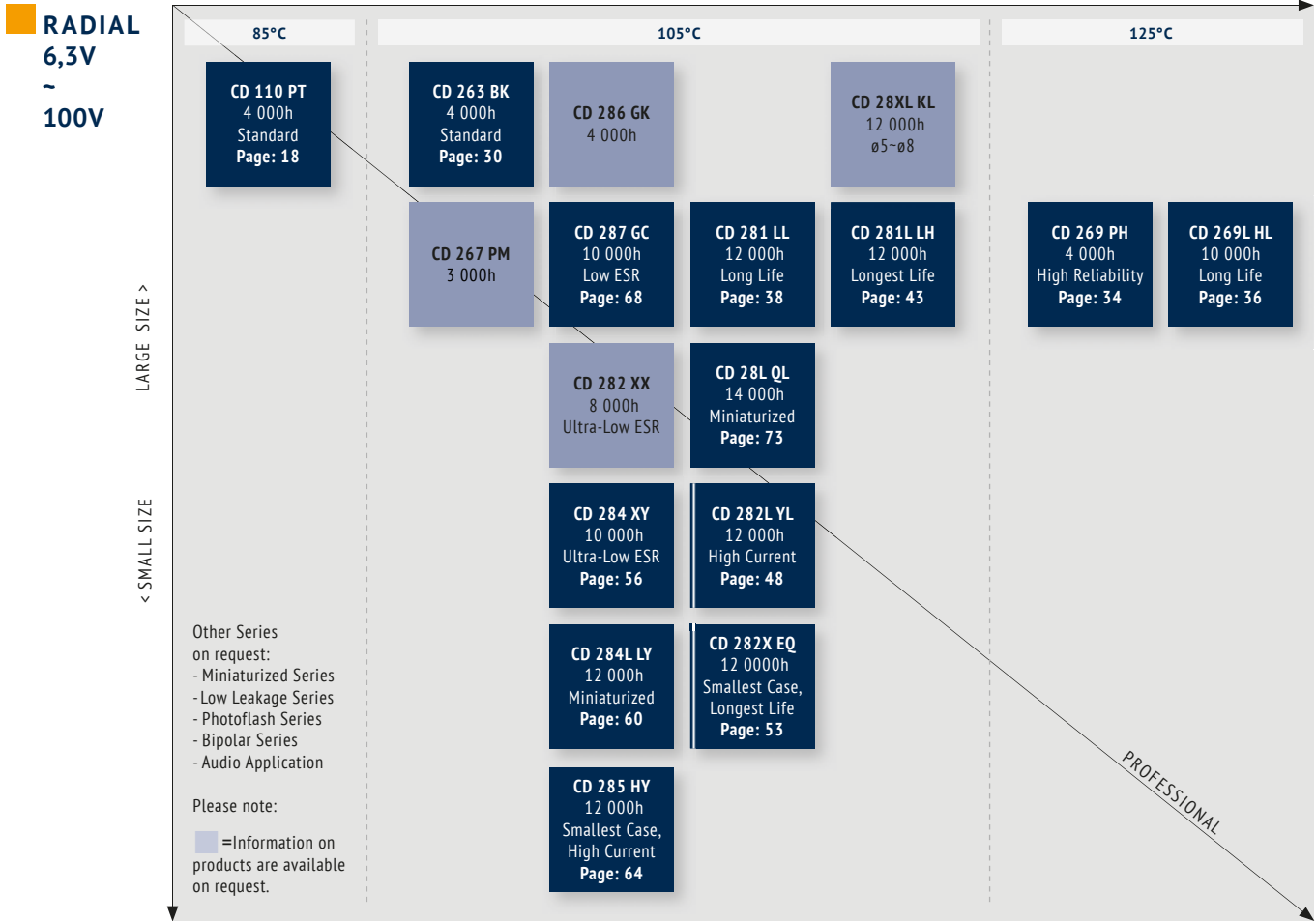
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|--------|----|---------|-------|-------|--------|-------------|-----|
| PC HPA | PA | Stacked | 105°C | 2-25V | 2 000h | Standard | 183 |
| PC HPS | PS | Stacked | 105°C | 2-10V | 2 000h | Low Profile | 183 |

■ HYBRID SMD & RADIAL 184

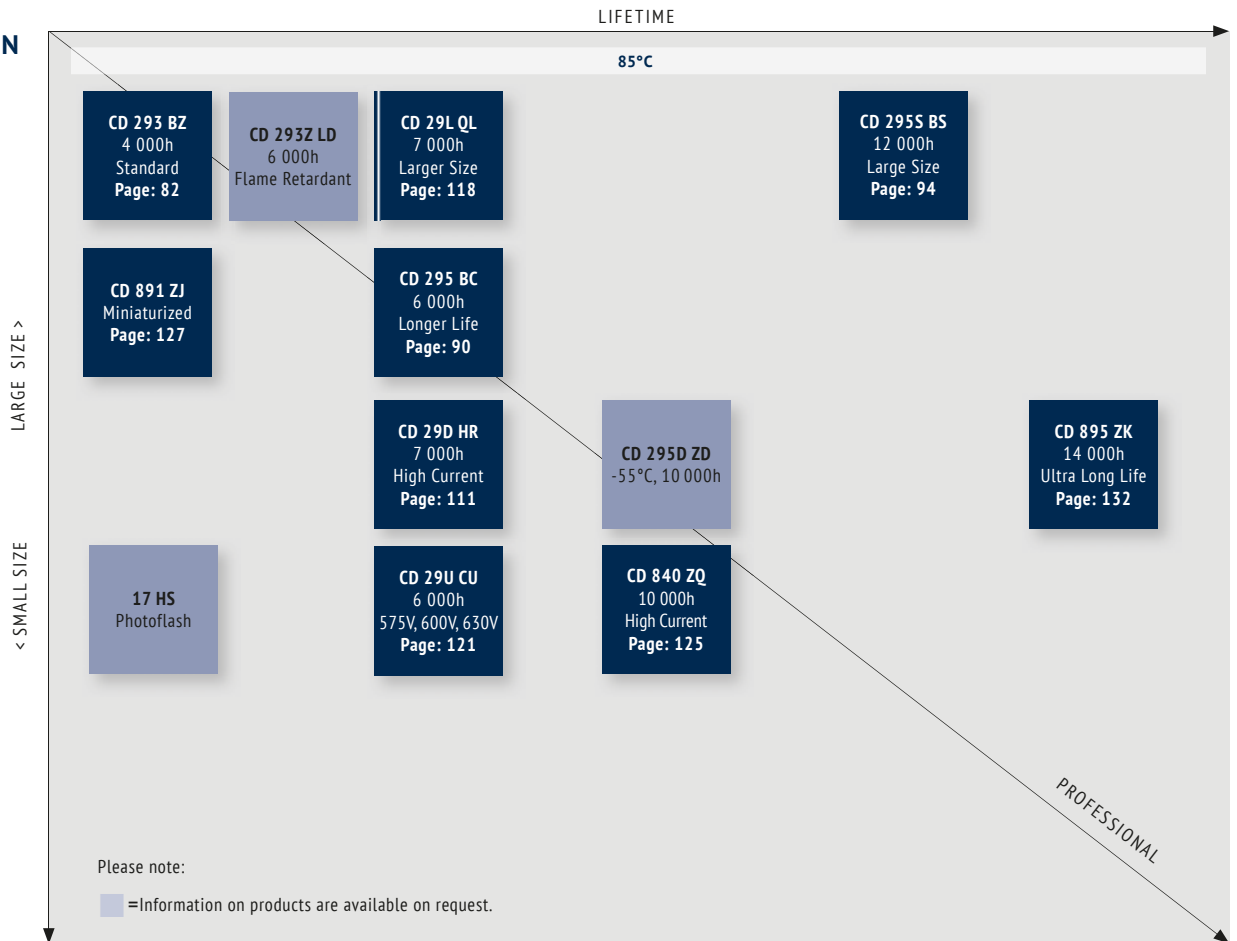
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|-------|----|--------|-------|--------|--------|------------------|-----|
| PH VA | VA | SMD | 105°C | 25-80V | 5 000h | Standard | 184 |
| PH VB | VB | SMD | 125°C | 25-80V | 4 000h | High Temperature | 184 |
| PH LA | LA | Radial | 105°C | 25-80V | 5 000h | Standard | 184 |
| PH LB | LB | Radial | 125°C | 25-80V | 4 000h | High Temperature | 184 |

SOLID

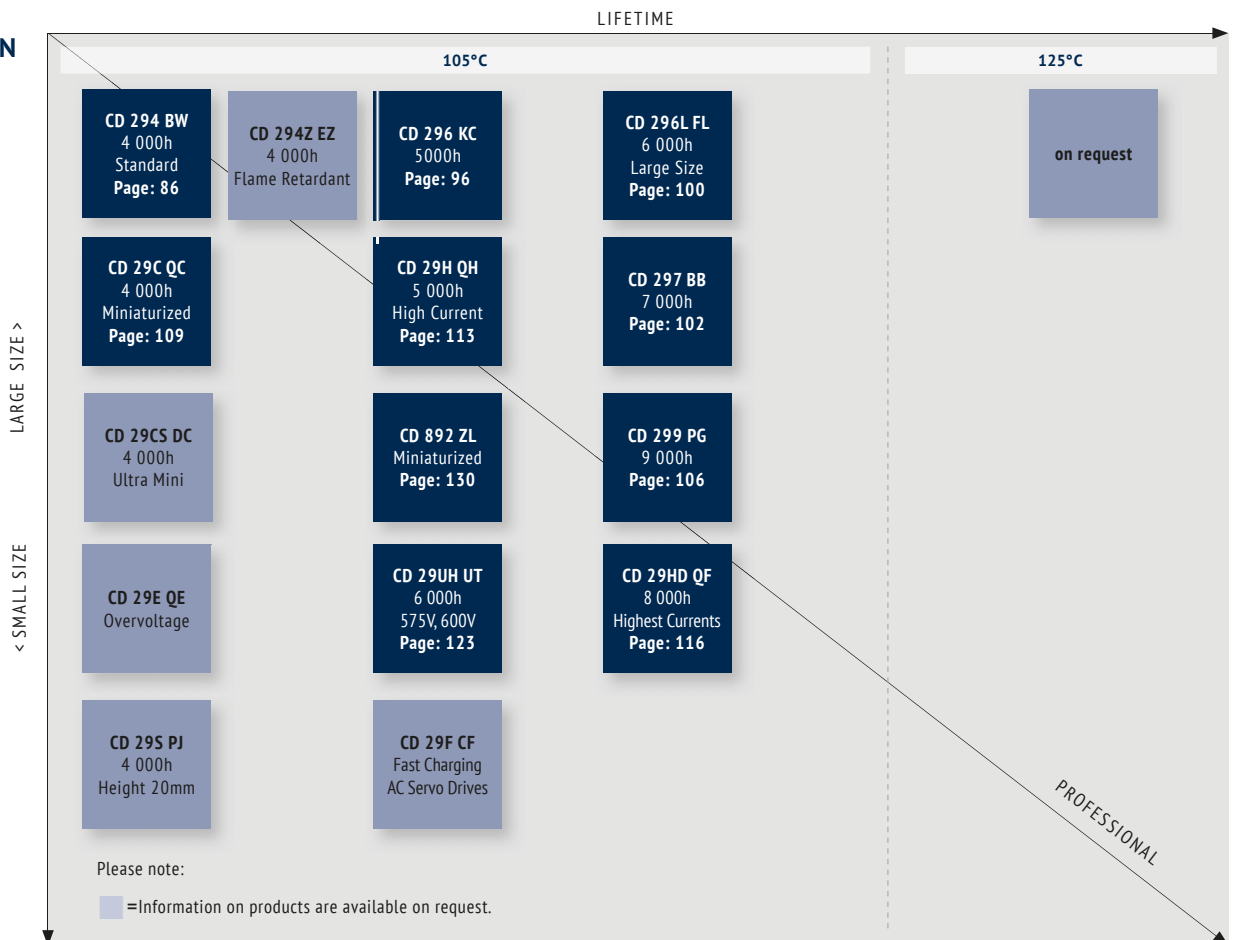
HYBRID



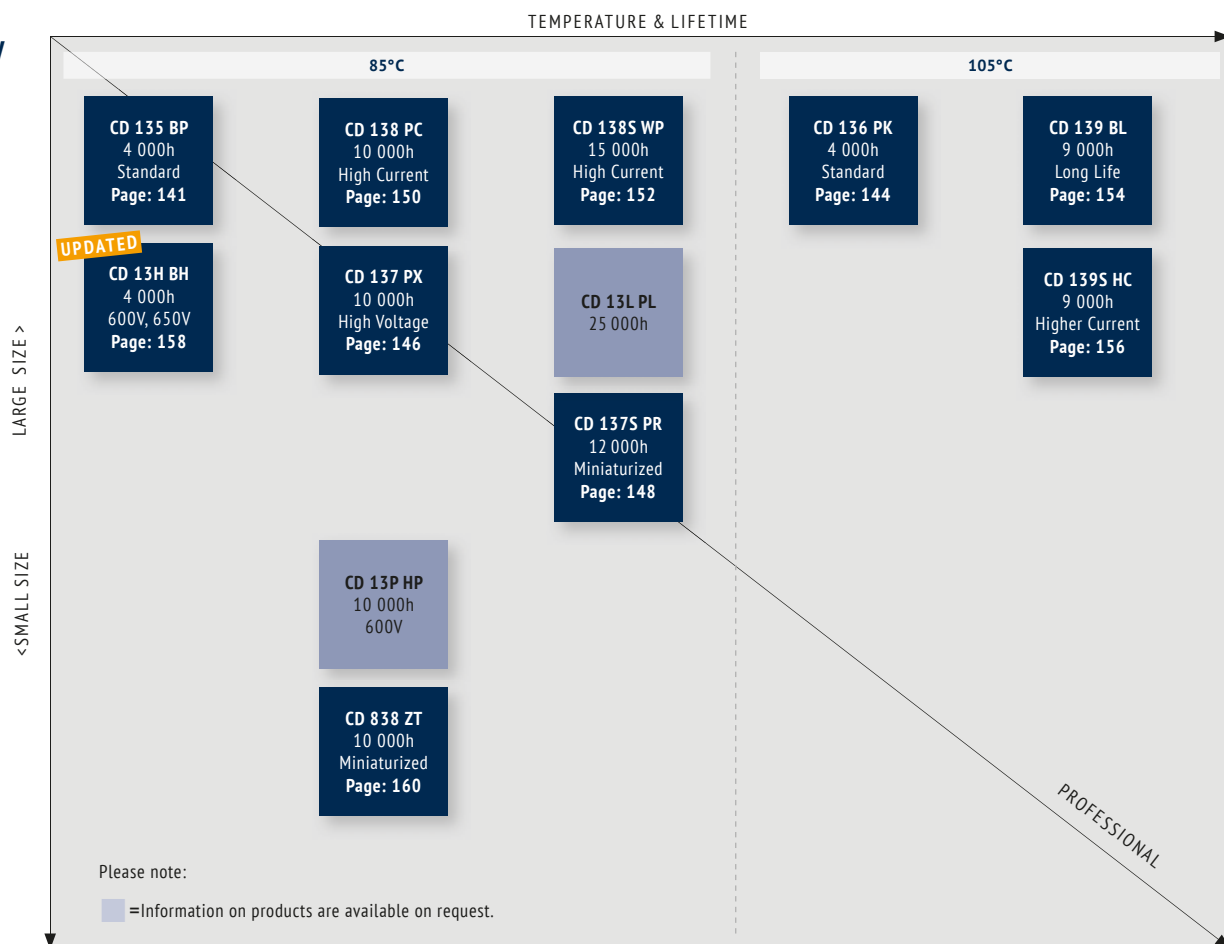
SNAP-IN
85°C



SNAP-IN
105°C/
125°C



SCREW



LIFETIME ESTIMATION OF ALUMINUM ELECTROLYTIC CAPACITORS FROM JIANGHAI

To estimate the Lifetime of a non-solid Aluminum Electrolytic Capacitor from Jianghai, the following formulas can be utilized. The Lifetime depends mainly on the ambient temperature, the ripple current and, within certain limits, the operating voltage applied. Other parameters may also affect the Lifetime. Moreover, L_0 can be interpreted in many different ways, which has a fundamental influence on the numerical result. Jianghai offers a high transparency by publishing the different typical definitions of Lifetimes in each datasheet. Lifetime estimations are approximations by nature. Please let JIANGHAI EUROPE confirm any result before using it. The formulas given here do not constitute part of a contract nor of a specification. The formulas do not cover additional aging effects of certain electrolytic systems or other chemical effects. Also the dimensions of the components may have an effect. Forced cooling or other additional cooling-methods have a strong impact on the Lifetime and are not covered by the formulas as defined. For the estimation and interpretation of Lifetime, a close collaboration with JIANGHAI EUROPE is strongly advised.

STRUCTURAL FORMULA

$$L = L_0 \cdot K_T \cdot K_R \cdot K_V$$

WHERE:

- L Total Lifetime
- L_0 Lifetime under Nominal Load at Upper Category Temperature (see catalogue)
- K_T Temperature Factor
- K_R Ripple Current Factor
- K_V Voltage Factor

K_T TEMPERATURE FACTOR

Aluminum Electrolytic Capacitors follow roughly the 10 K rule of Arrhenius. It is possible to estimate the Lifetime by rule of thumb: When the operational temperature is reduced by 10 K, the Lifetime will double. The formula for K_T in detail is:

$$K_T = 2^{\frac{T_0 - T_A}{10K}}$$

WHERE:

- T_0 Rated Temperature
- T_A Ambient Temperature

K_R RIPPLE CURRENT FACTOR

To estimate the influence of ripple current on lifetime, Jianghai uses a safety factor K_i . Under certain conditions this value can be set to $K_i=2$, which is prolonging the lifetime. Please contact Jianghai Europe for details and approval.

$$K_R = K_i^A \frac{\Delta T_0}{10K}$$

WITH:

$$A = 1 - \left(\frac{I_A}{I_R} \right)^2$$

WHERE:

- I_A Actual Rated Ripple Current
- I_R Ripple Current at Upper Category Temperature (databook value)
- ΔT_0 Core Temperature Rise of the capacitor (typically 3,5 ~ 5 K for $T_0 = 105^\circ\text{C}$ and 3,5 ~ 10K for $T_0 = 85^\circ\text{C}$, see databook value)
- K_i Basis, typically defined as

| | | |
|---------------------------|-----------------|---------|
| $T_0 = 105^\circ\text{C}$ | $I_A > I_R:$ | $K_i=4$ |
| | $I_A \leq I_R:$ | $K_i=2$ |
| $T_0 = 85^\circ\text{C}$ | | $K_i=2$ |



Remark: Safety Factor K_i may be set as $K_i=2$ under certain defined conditions. Please contact Jianghai Europe for approval.

K_V VOLTAGE FACTOR

For Radial Electrolytic Capacitors, this part of the formula has no impact ($K_V = 1$). But for some bigger capacitors like Snap-In and Screw-Terminal types with rated voltages above 160V, the operating voltage will affect their Lifetime. It is expressed as follows:

FOR:

$$0,6 \leq \frac{U_A}{U_R} \leq 1$$

$$K_V = \left(\frac{U_A}{U_R} \right)^{-2,5}$$

WHERE:

- U_A Actual Operating Voltage
- U_R Rated Voltage

FOR:

$$0 < \frac{U_A}{U_R} < 0,6$$

$$K_V = 3,59$$

FOR:

$$\frac{U_A}{U_R} > 1 \text{ not allowed}$$

$$K_V = 1$$

FOR: Radial Capacitors or $U_R \leq 160V$

$$K_V = 1$$

FREQUENCY CORRECTION FACTORS:

If the actual Ripple Currents are not given at the same frequency like I_0 , correction factors need to be applied.

$$I_A = \sqrt{\left(\frac{I_{f1}}{F_{f1}}\right)^2 + \left(\frac{I_{f2}}{F_{f2}}\right)^2 + \dots + \left(\frac{I_{fn}}{F_{fn}}\right)^2}$$

JIANGHAI ELECTROLYTIC CAPACITOR LIFETIME ESTIMATION FORMULA (incl. Safety Factors):

$$L = L_0 \cdot 2^{\frac{T_0 - T_A}{10K}} \cdot K_i \left[1 - \left(\frac{I_A}{I_R}\right)^2 \right]^{\frac{\Delta T_0}{10K}} \cdot \underbrace{\left(\frac{U_A}{U_R}\right)^{-n}}_{K_V}$$

WITH TYPICAL VALUES:

$T_0 = 105^\circ C$ $I_A > I_R$: $K_i = 4$

$I_A \leq I_R$: $K_i = 2$

$T_0 = 85^\circ C$ $K_i = 2$

$\Delta T_0 =$ depending on the series: 3,5~10K,
see databook value

$$0,6 \leq \frac{U_A}{U_R} \leq 1 \rightarrow n = 2,5$$

$$0 < \frac{U_A}{U_R} < 0,6 \rightarrow K_V = \left(\frac{U_A}{U_R}\right)^{-n} = 3,59$$

For $U_R \leq 160V$, Radial and

$$\frac{U_A}{U_R} > 1 \rightarrow K_V = 1$$

HANDLING PRECAUTIONS FOR ALUMINUM ELECTROLYTIC CAPACITORS FROM JIANGHAI

WARNING

JIANGHAI is not liable for any extent of possible injuries or damages to persons or things, of any kind, caused by the improper application of and/or operating conditions harmful to electrolytic capacitors. Misapplications which may cause failures include, but are not limited to: ripple current or peak current or voltage above specification, operating voltage above surge voltage specified, temperature exposure outside the specified operating temperature range. Examples of harmful operating conditions comprise, but are not limited to: unusual storage or transport temperatures, excessive and/or rapid changes of ambient temperature or humidity, heavy mechanical shock or vibration, corrosive and abrasive particles in the ambient (cooling) air, conducting dust in the ambient (cooling) air, oil or water vapor or corrosive substances, explosive gas or dust, operation under extremely high or low ambient pressure conditions (below or above sea level), superimposed radio frequency voltages, radioactivity. In case of doubt about the impact of operating conditions on capacitor performance, please contact JIANGHAI.

PERSONAL SAFETY

Electrical or mechanical misapplication of electrolytic capacitors may be hazardous. Personal injury or property damage may result from explosion of a capacitor or from the expulsion of electrolyte due to mechanical disruption or the release of a safety vent of a capacitor. In case of injury or skin or eye exposure to electrolyte, immediately seek professional medical advice. Before using electrolytic capacitors in any application, please read these Handling Precautions, familiarizing thoroughly with the information contained herein. Please check before using any of our electrolytic capacitors if these components fulfill the requirements of your application and that warnings and instructions for use are followed.

WARRANTY

The information contained in this catalogue does not form part of any quotation or contract, is believed to be accurate, reliable and up to date. Quality data are based on the statistical evaluations of a large quantity of parts and do not constitute a guarantee in a legal sense. However, agreement on these specifications does mean that the customer may claim for replacement of individual defective capacitors within the terms of delivery. We will not assume any liability beyond the replacement of defective components. This applies in particular to any consequential damage caused by component failure. Furthermore it must be taken into consideration that the figures stated for lifetime, failure rates and outlier percentages refer to the average production status and are therefore to be understood as mean values (statistic expectations) for a large number of delivery lots of identical capacitors. These figures are based on application experience and data obtained from preceding tests under normal conditions, or – for purpose of accelerated aging – more severe conditions. JIANGHAI reserves the right to change these specifications without prior notice. Any application information given is advisory and does not form part of any specification. The products are not primarily designed for use in life support applications, devices or systems where malfunction of these products can reasonably be expected to result in personal injury. JIANGHAI customers using or selling these products for use in such applications without prior written consent of JIANGHAI do so at their own risk and agree fully to indemnify JIANGHAI for any damage resulting from such improper use or sale. This version of the catalogue supersedes all previous versions. Latest versions of datasheets can be found on our homepage: www.jianghai-europe.com. For more details on precautions and guidelines for aluminum electrolytic capacitors, please refer to CENELEC Technical Report CLC/TR 50454:2008 E, "Guide for the application of aluminum electrolytic capacitors".

POLARITY

Electrolytic capacitors are polar and shall never be used with incorrect polarity, as there is a possible danger of shorting or destruction.

RATED VOLTAGE U_R

The rated voltage is marked on the capacitor and defined in the datasheets as U_R . This voltage should never be exceeded and is the maximum peak voltage including any ripple voltages allowed to avoid a shortening of the lifetime or damage of the capacitor. When a ripple current is applied to the capacitor, the sum of the peak ripple voltage and bias DC voltage shall never exceed the rated voltage. It might be necessary to lower the maximum allowed bias DC voltage, when certain ripple currents are applied to the capacitor.

SURGE VOLTAGE

Maximum voltage, which may be applied to the capacitor for short periods of time: max. 1000 cycles of 30 sec. per 6 min., max. 5 pulses per hour. Capacitance drift +/- 15% max.

REVERSE VOLTAGE

Reverse voltages or voltages < 0V are not allowed.



RECOVERY VOLTAGE

Electric potential between the positive and negative terminal may exist as a result of dielectric absorption. Please take action that this load does not damage other devices or scare workers during the production process (sparks possible). If needed please discharge the capacitor through a 1kΩ resistor.

TEMPERATURE RANGE

Use electrolytic capacitors only within the specified operating temperature range.

OVER-CURRENT

Currents exceeding the rated ripple currents should be avoided.

RIPPLE CURRENT/VOLTAGE

The combined value of DC voltage and peak AC voltage (due to ripple current) shall not exceed the rated voltage and shall never be < 0V. Use of aluminum electrolytic capacitors under ripple current with wide amplitudes is equivalent to rapid charge-discharge operation.

RAPID CHARGING/DISCHARGING

Rapid charging/discharging generates severe heat and gas may be emitted which may lead to explosion. Consult JIANGHAI about specially designed capacitors suitable for such kind of applications. Example: Servo Drive Application

BALANCING RESISTORS

Balancing resistors should be utilized if capacitors are used in serial connection. Please choose low-tolerance resistors to limit voltage drift.

CHARGE-DISCHARGE PROOF

JIANGHAI capacitors are charge-discharge proof, which means that 10⁶ switching cycles will cause capacitance reduction of less than 10%.

LIFETIME

There are many different lifetime definitions known without any true standard definition. Take special care when capacitors are compared that the capacitors fulfill the needed requirements. JIANGHAI publishes all conditions to be as transparent as possible. In the case of lifetime tests with additional ripple currents, the bias DC voltage must be reduced, so that the sum of bias DC voltage and the peak of the ripple voltage does not exceed the Rated Voltage U_R.

Load life: Period of time, during which the technical parameters of all capacitors stay within the given limits. JIANGHAI defines this without allowing for outliers.

Useful life: Defined like load life, but with a larger range of parameter change.

Endurance test: IEC 60384-4 defines the acceptable drift criteria of electrical parameters after the endurance tests (continuous voltage test).

Shelf Life: Definition of time with acceptable drift of capacitor parameters after storage at upper category temperature without load.

VIBRATION AND MECHANICAL STRESS

Capacitors are sensitive to vibration and mechanical forces applied on the leads. Do not use capacitors, which have been dropped onto a rigid surface.

INSULATION

If any defect of the sleeve is visible, the component should not be used – the same holds for any kind of visible damage. A capacitor should be electrically isolated from the following parts: aluminum case, cathode lead wire, anode lead wire and circuit pattern, and auxiliary terminal of snap-in type. The sleeve is not recognized as an isolator and therefore the standard capacitor should not be used in a place where insulation function is needed. Please contact JIANGHAI if a higher grade of insulation is required.

ENVIRONMENTAL CONDITIONS

Avoid direct contact with water, salt solution, oil, dewing conditions. Halogens generally, especially fumigation treatment with bromides and flame retardant agents containing halogens must be avoided. Avoid exposing to direct sunshine, ozone, ultraviolet rays and x-ray radiation. Air Pressure: Max. 150kPa, min. 8kPa. For usage >2000m altitude above sea level current deratings might be necessary. No heavy air pressure changes are allowed. Do not use or store in an environment containing any hazardous gas (e.g., hydrogen sulphide, sulphurous acid, nitrous acid, chlorine, ammonia, bromine, methyl bromide, other halogens) or acidic or alkaline solutions.

STORAGE

Temperature 5 to 35°C, relative humidity below 75%. Electrolytic capacitors may accumulate charge naturally during storage. In this case discharge through a 1kΩ resistor before use (Recovery voltage). Leakage current may be increased after long storage time. In this case the capacitor should be subjected to the rated voltage treatment through a 1kΩ resistor before use for 1 hour, then it should be discharged through a resistor of about 1 Ohm/Volt. Storage times above 1 year should be avoided or rated

voltage treatment may be necessary. In accordance to IEC 60384-4 electrolytic capacitors are subject to a reforming process before acceptance testing. Rated voltage is applied via a series resistance (100Ω: U_R ≤ 100VDC, 1kΩ: U_R > 100VDC).

SOLDERING

Soldering conditions (temperature, times) should be within specified conditions, especially for SMD components. Avoid high soldering temperatures as this may reduce lifetime or damage the capacitor. Do never dip the capacitor body into molten solder. Flux should not be adhered to the capacitor's body but only to its terminals. For details and different methods please contact us.

GLUEING, CLEANING AND COATING

Do not use fixing agents or cleaning substances containing halogens. Do not use coating and moulding components that completely seal the capacitor from the environment. Also, never use solvents containing: halogenated hydrocarbons, alkali, petroleum, trichloroethylene/-ethane, xylene, acetones, trichlorotrifluoroethane, tetrachloroethylene, methylenechloride, chloroform, acetates, ketones, esters, chlorides and bromides.

MOUNTING

Other devices, which are mounted near the capacitor, should not touch the capacitor. Additional heat coming from other components near the capacitor may reduce the lifetime of the capacitor. Do never bend or twist the capacitor after soldering to avoid stress on the leads. Radial capacitors are not protected against mechanical forces on the leads. Forces on the pins might damage the capacitor. No printed circuit board tracks are allowed between the lead pads of the capacitor. Screw Terminal capacitors should only be mounted in an upright position.

TRANSPORT

Avoid fumigation and spraying insecticides (especially with bromides) in the import or export procedures which can cause corrosion. This applies also to the finished devices.

MAINTENANCE

Periodical inspection should be carried out for the capacitor: visual inspection to check pressure relief open or leakage of electrolyte, electrical characteristics as leakage current, capacitance, and dissipation factor.

ELECTROLYTE AND SEPARATOR PAPER

Electrolyte and separator paper used in aluminum capacitors may be flammable. Also, electrolyte is electrically conductive. Therefore, in case electrolyte gets in contact with PC board it may cause corrosion of circuit pattern or cause short circuit between patterns, and may lead to smoke generation or ignition in worst case.

CAUTION DURING USE OF CAPACITORS

Do not touch the terminals of capacitors. Keep the capacitor free from conductive solution, such as acids, alkali and so on. Ensure that the operating environment of the equipment into which the capacitor has been built is within the specified conditions mentioned in the catalogue or specification sheets.

SAFETY VENT

The safety vent needs some free space to open properly. Allow for free headroom of at least 2mm for diameter ≤16mm, more than 3mm for diameter 18-35mm, more than 5mm for case diameter 40mm and larger.

EMERGENCY ACTIONS

When the pressure relief vent is open and some gas blows out from the capacitor, please turn the main switch of the equipment off or pull out the plug from the power outlet immediately. During safety vent operation, extremely hot gas (>100°C) may blow out of the capacitors. Do not stand close to the capacitors. In case of eye contact, rinse the open eye(s) with clean water immediately. In case of ingestion, gargle with water immediately, do not swallow. Do not touch electrolyte but wash skin with soap and water in case of skin contact.

DEFINITION OF ELECTRICAL PARAMETERS

Separate documents as application notes, equivalent circuit diagrams and so on are available on request.

PACKAGING

Please refer to the data book for details. Further information is available on request.

DISPOSAL

Scrapped capacitors are classified as scrapped metal. For disposal they are handled as controllable industrial waste because of the nature of the contents (electrolyte). Most of the material is aluminum and cannot be completely burned.

Jianghai Europe Electronic Components GmbH

VERSION 10/2021



ELECTROLYTIC CAPACITORS

Polymer

OVERVIEW POLYMER CAPACITORS

| | |
|---|-----|
| Comparison & Lifetime Estimation | 164 |
| Handling Precautions for Solid Polymer Capacitors | 165 |
| Order code for Solid SMD Type | 166 |
| Technical Specifications SMD Type | 167 |
| Order code for Solid RADIAL Type | 168 |
| Technical Specifications RADIAL Type | 169 |

| SOLID | SERIES SMD | Code | Type | Temperature | Voltage | Lifetime | Info | |
|-------|----------------|--------|---------|-------------|---------|----------|-------------------------|----------|
| | | PC HVC | VC | SMD | 105°C | 2,5-25V | 2 000h | Standard |
| | PC HVF | VF | SMD | 105°C | 16-200V | 3 000h | Full Voltage | 170 ff. |
| | PC HVG | VG | SMD | 125°C | 2,5-20V | 1 000h | High Temperature | 170 ff. |
| | PC HVK | VK | SMD | 125°C | 16-80V | 2 000h | Enlarged Voltage, 125°C | 170 ff. |
| | PC HVM | VM | SMD | 105°C | 2,5-16V | 2 000h | Low ESR | 170 ff. |
| | PC HVS | SV | SMD | 105°C | 4-25V | 5 000h | Long Life | 170 ff. |
| | PC HVX | VX | SMD | 105°C | 2,5-10V | 2 000h | Ultra Low ESR | 170 ff. |
| | SERIES RADIAL | Code | Type | Temperature | Voltage | Lifetime | Info | |
| | PC HCN | CN | Radial | 105°C | 2,5-25V | 2 000h | Standard | 176 ff. |
| | PC HCS | CS | Radial | 105°C | 2,5-16V | 5 000h | Longest Life | 176 ff. |
| | PC HEG | EG | Radial | 105°C | 16-63V | 2 000h | Larger Case Sizes | 176 ff. |
| | PC HEL | EL | Radial | 105°C | 2,5-16V | 2 000h | Ultra Low ESR | 176 ff. |
| | PC HEN | EN | Radial | 105°C | 2,5-25V | 2 000h | Standard | 176 ff. |
| | PC HGN | GN | Radial | 125°C | 4-25V | 1 000h | High Temperature | 176 ff. |
| | PC HPF | PF | Radial | 105°C | 16-200V | 3 000h | Full Voltage | 176 ff. |
| | PC HPK | PK | Radial | 125°C | 16-80V | 2 000h | Enlarged Voltage, 125°C | 176 ff. |
| | PC HPN | HN | Radial | 105°C | 2,5-16V | 2 000h | Ultra Low ESR | 176 ff. |
| | PC HPNA | NA | Radial | 105°C | 2,5-16V | 2 000h | Ultra Low ESR | 176 ff. |
| | PC HSN | SN | Radial | 105°C | 2,5-25V | 2 000h | Standard | 176 ff. |
| | SERIES STACKED | Code | Type | Temperature | Voltage | Lifetime | Info | |
| | PC HPA | PA | Stacked | 105°C | 2,5-25V | 2 000h | Standard | 183 |
| | PC HPS | PS | Stacked | 105°C | 2-10V | 2 000h | Low Profile | 183 |
| | SERIES HYBRID | Code | Type | Temperature | Voltage | Lifetime | Info | |
| | PHVA | VA | SMD | 105°C | 25-80V | 5 000h | Standard | 184 |
| | PHVB | VB | SMD | 125°C | 25-80V | 4 000h | High Temperature | 184 |
| | PHLA | LA | Radial | 105°C | 25-80V | 5 000h | Standard | 184 |
| | PHLB | LB | Radial | 125°C | 25-80V | 4 000h | High Temperatures | 184 |

POLYMER

INTRODUCTION SOLID POLYMER CAPACITORS

Aluminum solid electrolyte capacitors with conductive polymer are wound aluminum electrolytic capacitors that use a polythiophene electrolytic system. The conductive polymer yields extremely low ESR-values that allow for very high ripple currents at high frequencies. Typically, these types of capacitors are used in smoothing circuits of DC-DC converters and in high-frequency applications. Polymer Capacitors from Jianghai has been enlarged to voltages up to 200V, which allows the usage in many power supply applications too.

COMPARISON OF SOLID POLYMER CAPACITORS AND LIQUID ELECTROLYTIC CAPACITORS

Besides the excellent lifetime performance, the temperature characteristics of polymer capacitors allow for a usage in a wide range of ambient temperatures. Temperatures in the range from -55°C to 105°C lead merely to capacitance changes from 10...15%, while the ESR remains almost constant. Especially the stability of its low ESR-values makes the polymer capacitor attractive for smoothing circuits or for decoupling functions. Compared to tantalum electrolytic capacitors, polymer capacitors offer a more reliable solution with a similar functionality.

HYBRID POLYMER CAPACITORS

Hybrid Polymer Capacitors combine the technology of Solid Polymer Capacitors and Liquid Electrolytic Capacitors. As a result Hybrid Capacitors follow the rules of both technologies. Please consider carefully the Handling Precautions for Liquid Aluminum Electrolytic Capacitors (page: 10) and Solid Polymer Capacitors (page: 165) together. The lifetime of Hybrid Polymer Capacitors follows roughly the rules of Arrhenius like for Liquid Aluminum Electrolytic Capacitors, while the limitations of voltages and currents of the Polymer technology need to be applied. For details please contact Jianghai Europe.

LIFETIME ESTIMATION SOLID POLYMER CAPACITORS

In analogy to liquid electrolytic capacitors also solid polymer capacitors do have a lifetime. The characteristics differs from liquid capacitors in many ways. In the datasheets there are ripple currents defined. Anyway, most lifetime models do not include the currents for estimating the lifetime. The established lifetime models typically are based on voltage-temperature tests without any additional currents applied. As the capacitors are used in many cases under load conditions, where ripple currents are found, the many lifetime models do not meet well the real usage condition.

Jianghai defines for solid polymer capacitors different life times. Please take care when capacitors are compared, that the capacitors fulfill the needed requirements.

Endurance Lifetime L_e defines the acceptable drift criteria of the capacitor parameters, when the rated voltage is applied at the upper category temperature, without adding any ripple currents.

Operational Lifetime L_o defines the acceptable drift criteria of the capacitor parameters, where the max. allowed ripple current is applied at the upper category temperature together with a DC voltage. The sum of this DC voltage and peak of the applied ripple voltage must not exceed the rated voltage.

$$L = L_o \cdot 10^{\frac{T_0 - T_A + 20K \cdot \left[1 - \left(\frac{I_A}{I_{max}} \right)^2 \right]}{20K}}$$

Where

- L Lifetime
- L_o Operational Lifetime
- T_0 Rated Temperature, Upper Category Temperature
- T_A Ambient Temperature
- I_A Actual Rated Ripple Current (at 100kHz)
- I_{max} Max. Allowed Ripple Current (databook value)

For Polymer Capacitors of 125°C temperature class:

Please consult Jianghai Europe for life time calculation and consider the current derating for temperatures > 105°C.

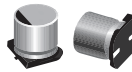
HANDLING PRECAUTIONS SOLID POLYMER

Please see “General Handling Precautions” at page 10.

Additional requirements for aluminum solid electrolyte capacitors with conductive polymer:

- 1) Solid polymer capacitors do have a polarity. Never allow a reverse or negative voltage.
- 2) Over-voltages higher than the rated voltage will destroy the capacitors and must be avoided. The sum of DC voltage and the ripple voltage peak must not exceed the rated voltage.
- 3) If the rated voltage is low, take care that any negative ripple voltage peak does not become a reverse voltage. The minimum peak ripple voltage should be larger than $0,1 \cdot U_r$.
- 4) Leakage Currents might increase as consequence of longer storage, critical soldering processes, overload conditions, heavy charging/discharging, mechanical stress. Please note that solid polymer capacitors need a longer time for an internal repair than liquid capacitors. An increase of the leakage current shall be taken as an indication of a possible damage and should be avoided generally. It is essential to ensure a correct soldering profile. Please follow the recommendation of Jianghai page 169. In case of any questions please contact Jianghai Europe.
- 5) Polymer Capacitors cannot be used:
 - in circuits with frequent and/or rapid charging and discharging function,
 - in time-constant or coupling circuits,
 - in high impedance circuits or applications, where the leakage current affects the circuit operation,
 - after heavy thermal stress during soldering as the capacitance and leakage current may change,
 - under mechanical stress. Avoid mechanical vibration and shock.
 - in applications with heavy discharges / negative transients higher than 20% of U_r .
- 6) Ripple currents above the specified rating must be avoided as they may damage the capacitor.
- 7) Serial connections shall be avoided to prevent possible overvoltage conditions.
- 8) When parallel connections between polymer capacitors are planned, please take proper current balancing into account.
- 9) Use a protection circuit when the inrush current exceeds 10A. Especially higher voltage capacitor might need an individual protection against high inrush currents.
- 10) Always consider the safety when designing circuits. Plan for worst case failures such as short circuits and open circuits.
- 11) Protect Polymer capacitors from short-circuiting. Such high currents might destroy the capacitor and in rare case ignite the rubber inside the capacitor.
- 12) Laminated capacitors need to be handled like non-isolated components. Please take care of a completely separation of the lead wires and the case of the capacitor.
- 13) Without written consent by Jianghai, Polymer capacitors should not be used in highly reliable or life sustaining applications such as: medical equipment, aviation/aerospace equipment, automotive and nuclear applications and others, where a capacitor failure may have a major impact.
- 14) Environmental restrictions: please follow carefully all restrictions valid for liquid electrolytic capacitors, described in the “General Handling Precautions” at page 10. In addition any contact with water, especially salt water and/or oil must be avoided. In the same way the usage of polymer capacitors in places with higher concentration of noxious gases like hydrogen sulfide, sulfide acid, chlorine, ammonia and other is not allowed. Protect the capacitors against radiation, especially ultraviolet rays. If a circuit board cleaning is planned, please contact Jianghai Europe for approval of the cleaning process to avoid damages of the capacitors.
- 15) Never reuse capacitors if they have been assembled and energized already.
- 16) Do not drop capacitors or apply any mechanical shock. If this has happened, please do not use them anymore.
- 17) Storage: Do not store the capacitors at high temperature or high humidity, without any direct sunlight. Please keep the temperature in a range of 5°C to 35°C and a relative humidity less than 75%. In order to keep a good solder ability, store the capacitors in its plastic bags. The maximum storage time shall be limited to one year.
- 18) For Polymer Capacitors of 125°C temperature class current deratings for temperatures > 105°C might be necessary. Please check carefully the individual datasheet.

ORDER CODE SOLID POLYMER SMD TYPE

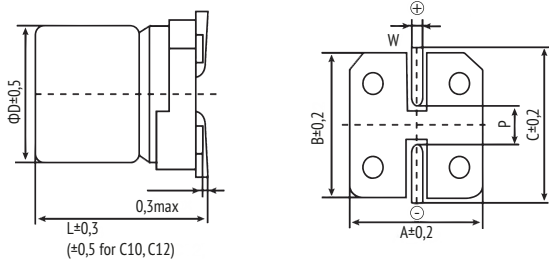


| PC | V | 1V | VG | 101 | M | B10 | FV | - | W | E3 | JExxxxx | | | | | | | | |
|---------------------------|---------------|--------------------|-------------|------------------------|-----------------------|------------------|-----------|-------|--|------------------|-------------------|-------|----|----------|---|-----------|---|---|-----------|
| Techno-logy | Terminal Type | Rated Voltage Code | Series Code | Capa-citance Code (µF) | Capacitance Tolerance | Size Code (ΦDxL) | Lead Form | Pitch | Material Code | for internal use | for Specials only | | | | | | | | |
| PC = Polymer Capacitor | SMD | V | 2,0V | OD | HVC | VC | 0,1 | OR1 | <div style="background-color: #FFD700; padding: 2px;">±20%</div> M | F60 | 6,3 x 5,7 | Taped | FV | Standard | - | Laminated | W | | |
| | | | 2,5V | OE | HVF | VF | 0,47 | R47 | | ±10% | K | | | | | | | F80 | 6,3 x 7,7 |
| | | | 4V | OG | HVG | VG | 1,0 | 010 | | +30/-10% | Q | | | | | | | B70 | 8,0 x 6,7 |
| | | | 6,3V | OJ | HVK | VK | 2,2 | 2R2 | | | | | | | | | | <div style="background-color: #FFD700; padding: 2px;">preferred</div> | B80 |
| | | | 6,8V | 06 | HVM | VM | 47 | 470 | | B10 | 8,0 x 10,0 | | | | | | | | |
| | | | 7,0V | 07 | HVS | SV | 100 | 101 | | B12 | 8,0 x 12,2 | | | | | | | | |
| | | | 7,5V | 75 | HVX | VX | 1000 | 102 | | C80 | 10 x 8,0 | | | | | | | | |
| | | | 10V | 1A | | | | | | C10 | 10 x 10,0 | | | | | | | | |
| | | | 12,0V | A1 | | | | | | C12 | 10 x 12,2 | | | | | | | | |
| | | | 12,5V | 1B | | | | | | | | | | | | | | | |
| | | | 16V | 1C | | | | | | | | | | | | | | | |
| | | | 20V | 1D | | | | | | | | | | | | | | | |
| | | | 25V | 1E | | | | | | | | | | | | | | | |
| | | | 28V | L1 | | | | | | | | | | | | | | | |
| | | | 32V | 1F | | | | | | | | | | | | | | | |
| | | | 35V | 1V | | | | | | | | | | | | | | | |
| | | | 40V | 1G | | | | | | | | | | | | | | | |
| | | | 50V | 1H | | | | | | | | | | | | | | | |
| | | | 63V | 1J | | | | | | | | | | | | | | | |
| | | | 80V | 1K | | | | | | | | | | | | | | | |
| 100V | 2A | | | | | | | | | | | | | | | | | | |
| 125V | 2B | | | | | | | | | | | | | | | | | | |
| 160V | 2C | | | | | | | | | | | | | | | | | | |
| 180V | 2K | | | | | | | | | | | | | | | | | | |
| 200V | 2D | | | | | | | | | | | | | | | | | | |

POLYMER



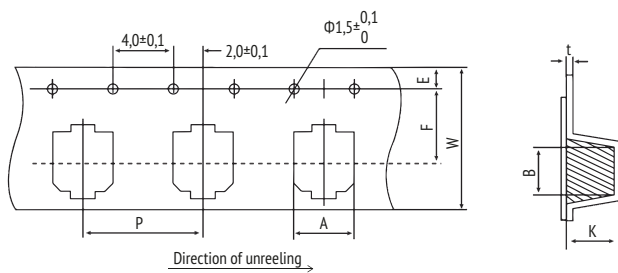
DIMENSIONS FOR SMD TYPE



| Size Code | D | L | A | B | C | W | P ± 0,2 |
|-----------|------|------|------|------|------|----------|---------|
| F60 | 6,3 | 5,7 | 6,6 | 6,6 | 7,3 | 0,5-0,85 | 2,0 |
| F80 | 6,3 | 7,7 | 6,6 | 6,6 | 7,3 | 0,5-0,85 | 2,0 |
| F10 | 6,3 | 10,0 | 6,6 | 6,6 | 7,3 | 0,7-1,1 | 2,0 |
| B70 | 8,0 | 6,7 | 8,3 | 8,3 | 9,0 | 0,5-0,85 | 3,1 |
| B80 | 8,0 | 7,7 | 8,3 | 8,3 | 9,0 | 0,7-1,1 | 3,1 |
| B10 | 8,0 | 10,0 | 8,3 | 8,3 | 9,0 | 0,7-1,1 | 3,1 |
| B12 | 8,0 | 12,2 | 8,3 | 8,3 | 9,0 | 0,7-1,1 | 3,1 |
| C80 | 10,0 | 8,0 | 10,3 | 10,3 | 11,0 | 0,7-1,1 | 4,6 |
| C10 | 10,0 | 10,0 | 10,3 | 10,3 | 11,0 | 0,7-1,1 | 4,6 |
| C12 | 10,0 | 12,2 | 10,3 | 10,3 | 11,0 | 0,7-1,1 | 4,6 |

in mm

DIMENSIONS FOR TAPING

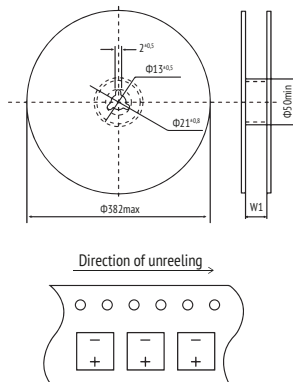


E = 1,75 ± 0,1 mm
t = 0,4 ± 0,1 mm

| Dimension | A | B | W | F | P | K |
|-----------|------|------|------|------|------|------|
| Case Code | ±0,2 | ±0,2 | ±0,3 | ±0,1 | ±0,1 | ±0,2 |
| F60 | 7,0 | 7,0 | 16,0 | 7,5 | 12,0 | 6,3 |
| F80 | 7,0 | 7,0 | 16,0 | 7,5 | 12,0 | 8,2 |
| F10 | 7,0 | 7,0 | 24,0 | 11,5 | 16,0 | 10,2 |
| B70 | 8,7 | 8,7 | 24,0 | 11,5 | 12,0 | 7,3 |
| B80 | 8,7 | 8,7 | 24,0 | 11,5 | 12,0 | 8,3 |
| B10 | 8,7 | 8,7 | 24,0 | 11,5 | 16,0 | 10,2 |
| B12 | 8,7 | 8,7 | 24,0 | 11,5 | 16,0 | 13,0 |
| C80 | 10,7 | 10,7 | 24,0 | 11,5 | 16,0 | 8,3 |
| C10 | 10,7 | 10,7 | 24,0 | 11,5 | 16,0 | 11,0 |
| C12 | 10,7 | 10,7 | 24,0 | 11,5 | 16,0 | 13,0 |

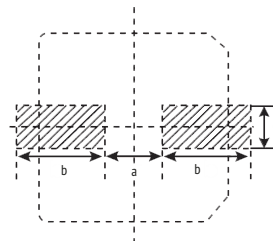
in mm

REEL DIMENSIONS



| Case Code | Quantity (pcs/reel) | W ₁ (mm) |
|-----------|---------------------|---------------------|
| F60 | 1 000 | 18 |
| F80 | 900 | 18 |
| F10 | 500 | 26 |
| B70 | 1 000 | 26 |
| B80 | 900 | 26 |
| B10 | 500 | 26 |
| B12 | 400 | 26 |
| C80 | 500 | 26 |
| C10 | 500 | 26 |
| C12 | 400 | 26 |

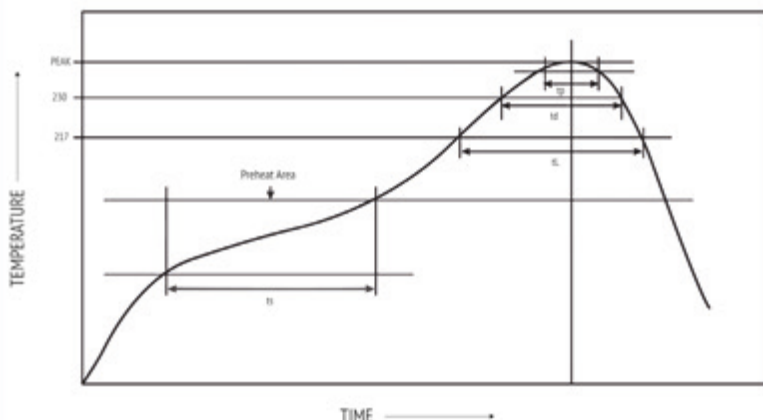
RECOMMENDED SOLDERING PAD



| φ D (code) | a | b | c |
|------------|-----|-----|-----|
| φ 6,3 (F) | 1,9 | 3,5 | 1,6 |
| φ 8 (B) | 3,1 | 4,2 | 2,2 |
| φ 10 (C) | 4,5 | 4,4 | 2,2 |

in mm

RECOMMENDED SOLDERING PROFILE SMD



| Voltage Range (Vdc) | Preheat | Time maintained above 217°C | Time maintained above 230°C | Peak Temperature |
|---------------------|-----------------------------|-----------------------------|-----------------------------|------------------|
| 2,5 - 16V | 150-180°C 60-120 seconds | 50 seconds max. | 40 seconds max. | 260°C max. |
| 20 - 200V | 150-180°C 60-120 seconds | 50 seconds max. | 40 seconds max. | 250°C max. |

Only 1 reflow soldering cycle allowed. All temperatures are measured on the topside of the Al-can.

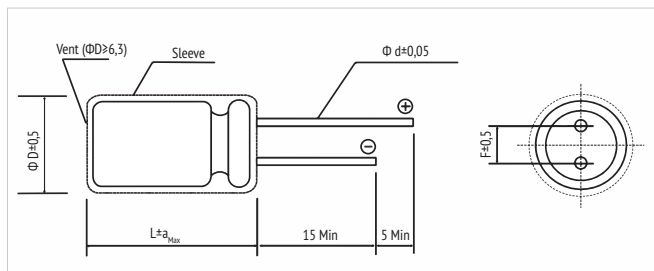


ORDER CODE SOLID POLYMER RADIAL TYPE

| PC | R | 1V | PF | 101 | M | CAC | LL | 50 | - | S | E3 | JExxxxx |
|---------------------------|-----------------|--------------------|----------------|------------------------|-----------------------|-----------------------|----------------------|------------------|---------------------|----------------------|------------------|-------------------|
| Techno-logy | Terminal Type | Rated Voltage Code | Series Code | Capa-citance Code (µF) | Capacitance Tolerance | Size Code (ΦDxL) | Lead Form | Pitch | Material Code | Rubber Code | for internal use | for Specials only |
| PC = Polymer Capacitor | Radial R | 2,0V OD | HCN CN | 0,1 OR1 | ±20% M | D05 4,0 x 5,7 | Taped FF | 2,0 mm 20 | Standard - | Standard - | | |
| | | 2,5V OE | HCS CS | 0,47 R47 | ±10% K | D07 4,0 x 7,0 | Long Lead LL | 2,5 mm 25 | Laminated W | Flat Rubber F | | |
| | | 4V OG | HEG EG | 1,0 O10 | +30/-10% Q | E05 5,0 x 5,7 | Cut 5,0 mm CB | 3,5 mm 35 | PVC Sleeve P | Stand-Off S | | |
| | | 6,3V OJ | HEL EL | 2,2 2R2 | preferred | E07 5,0 x 7,0 | Cut 4,5 mm CC | 5,0 mm 50 | | | | |
| | | 6,8V 06 | HEN EN | 47 470 | | S09 5,5 x 9,0 | Cut 4,0 mm CD | | | | | |
| | | 7,0V 07 | HGN GN | 100 101 | | S11 5,5 x 11,0 | Cut 3,5 mm CE | | | | | |
| | | 7,5V 75 | HPF PF | 1000 102 | | F05 6,3 x 5,7 | Cut 3,0 mm CF | | | | | |
| | | 10V 1A | HPK PK | | | F06 6,3 x 6,7 | | | | | | |
| | | 12,0V A1 | HPN HN | | | F07 6,3 x 7,0 | | | | | | |
| | | 12,5V 1B | HPNA NA | | | F08 6,3 x 8,0 | | | | | | |
| | | 16V 1C | HSN SN | | | F09 6,3 x 9,0 | | | | | | |
| | | 20V 1D | | | | F10 6,3 x 10,0 | | | | | | |
| | | 25V 1E | | | | B05 8,0 x 5,7 | | | | | | |
| | | 28V L1 | | | | B06 8,0 x 6,7 | | | | | | |
| | | 32V 1F | | | | B07 8,0 x 7,0 | | | | | | |
| | | 35V 1V | | | | B08 8,0 x 8,0 | | | | | | |
| | | 40V 1G | | | | B09 8,0 x 9,0 | | | | | | |
| | | 50V 1H | | | | B10 8,0 x 10,0 | | | | | | |
| | | 63V 1J | | | | B11 8,0 x 11,0 | | | | | | |
| | | 80V 1K | | | | BAB 8,0 x 11,5 | | | | | | |
| 100V 2A | | | | B12 8,0 x 12,0 | | | | | | | | |
| 125V 2B | | | | BAC 8,0 x 12,5 | | | | | | | | |
| 160V 2C | | | | B13 8,0 x 13,0 | | | | | | | | |
| 180V 2K | | | | C08 10 x 8,0 | | | | | | | | |
| 200V 2D | | | | C09 10 x 9,0 | | | | | | | | |
| | | | | | | C10 10 x 10,0 | | | | | | |
| | | | | | | C11 10 x 11,0 | | | | | | |
| | | | | | | CAB 10 x 11,5 | | | | | | |
| | | | | | | C12 10 x 12,0 | | | | | | |
| | | | | | | CAC 10 x 12,5 | | | | | | |
| | | | | | | C13 10 x 13,0 | | | | | | |

DIMENSIONS FOR LOOSE, LONG-LEAD TYPE (BULK)

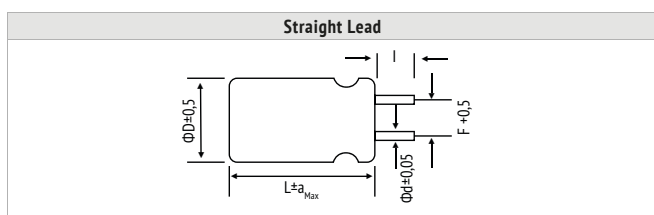
ORDER CODE: LL



| L | L < 7 | | | L ≥ 7 | | | |
|------|-------|-----|-----|-------|---------|-----|-----|
| Ø D | 5 | 6,3 | 8 | 5 | 5,5/6,3 | 8 | 10 |
| F | 2,0 | 2,5 | 3,5 | 2,0 | 2,5 | 3,5 | 5,0 |
| Ø d | 0,5 | | | 0,5 | | 0,6 | |
| aMax | 1,0 | | | 2,0 | | | |

in mm

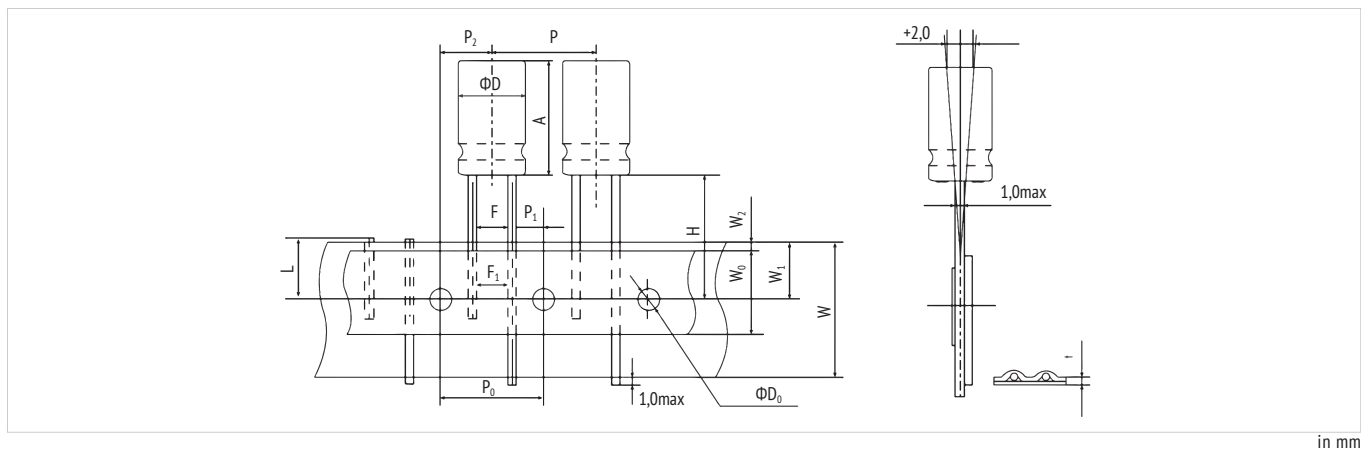
DIMENSIONS FOR LOOSE, CUT LEADS (BULK)



| Code | CB | CC | CD | CE | CF |
|------|-----------|-----------|-----------|------------------|-----------|
| I | 5,0 ± 0,5 | 4,5 ± 0,5 | 4,0 ± 0,5 | 3,5 ± 0,5 | 3,0 ± 0,5 |

■ preferred in mm

DIMENSIONS AMMOPACK TAPING



| ØD | A | P | P ₀ | P ₁ | P ₂ | F | F ₁ | W | W ₀ | W ₁ | W ₂ | H | L | ØD ₀ | t |
|-------|--------|-------|----------------|----------------|----------------|--------------|----------------|-------|----------------|----------------|----------------|---------------|------|-----------------|-------|
| ± 0,5 | | ± 1,0 | ± 0,2 | ± 0,5 | ± 1,0 | 0,8/ -0,2 | ± 1,0 | ± 0,5 | min | ± 0,5 | max | 0,75/ -0,5 | max | ± 0,5 | ± 0,3 |
| 5 | 5~11 | 12,7 | 12,7 | 5,35 | 6,35 | 2,0 | 3,5 | 18,0 | 10,0 | 9,0 | 1,5 | 18,5 | 11,0 | 4,0 | 0,7 |
| 5,5 | 9~11 | 12,7 | 12,7 | 5,1 | 6,35 | 2,5 | 3,5 | 18,0 | 10,0 | 9,0 | 1,5 | 18,5 | 11,0 | 4,0 | 0,7 |
| 6,3 | 5~12 | 12,7 | 12,7 | 5,1 | 6,35 | 2,5 | 3,5 | 18,0 | 10,0 | 9,0 | 1,5 | 18,5 | 11,0 | 4,0 | 0,7 |
| 8 | 6~12 | 12,7 | 12,7 | 4,6 | 6,35 | 3,5 | 3,5 | 18,0 | 10,0 | 9,0 | 1,5 | 18,5 | 11,0 | 4,0 | 0,7 |
| 10 | 7~12,5 | 12,7 | 12,7 | 3,85 | 6,35 | 5,0 | 5,0 | 18,0 | 10,0 | 9,0 | 1,5 | 18,5 | 11,0 | 4,0 | 0,7 |

POLYMER



| | |
|--|--|
| <p>2 000 - 5 000h at 105°C/125°C</p> <ul style="list-style-type: none"> · Low ESR · Solid Polymeric Electrolyte | |
|--|--|

ITEM CHARACTERISTICS

| | |
|-------------------------------------|--|
| Operating Temperature Range (°C) | -55 ~ +105/125 (see table) |
| Voltage Range (V) | 2,5 ~ 200 |
| Capacitance Range (µF) | 1,0 ~ 2 700 |
| Capacitance Tolerance (20°C, 120Hz) | ± 20% |
| Surge Voltage (V) | $U_R * 1,15$ |
| Dissipation Factor | at 20°C, 120 Hz, see table |
| Leakage Current (µA) | at 20°C after 2 minutes |
| Temperature Stability | $Z_{105°C} / Z_{20°C} \leq 1,25$ for 105°C capacitors $Z_{125°C} / Z_{+20°C} \leq 1,25$ for 125°C capacitors $Z_{-55°C} / Z_{+20°C} \leq 1,25$ |

! The usage at lower temperatures than indicated may be possible. Please contact the Jianghai Europe sales office for approval.

| ITEM | ENDURANCE LIFETIME L_e | OPERATIONAL LIFETIME L_o | DAMP HEAT (Steady State) | RESISTANCE TO SOLDERING HEAT SMD |
|--------------------|---|---|--|--|
| Lifetime | 1 000h ~ 5 000h* | 100h ~ 500h* | 1 000h | 5sec, Reflow |
| Leakage Current | ≤ the specified value | ≤ the specified value | ≤ the specified value (after voltage processing) | ≤ the specified value (after voltage processing) |
| Capacitance Change | Within ± 20% of initial value | Within ± 20% of initial value | Within ± 20% of initial value | Within ± 10% of initial value |
| Dissipation Factor | ≤ 150% of specified value | ≤ 150% of specified value | ≤ 150% of specified value | ≤ 130% of specified value |
| ESR Change | ≤ 150% of specified value | ≤ 150% of specified value | ≤ 150% of specified value | ≤ 130% of specified value |
| Condition | T_0 (upper category temperature) U_R $I_R = 0$ | T_0 (upper category temperature) U_R I_R | 60°C (90-95% relative humidity) $U_R = 0$ $I_R = 0$ | 260°C |

*concrete values: see table

*concrete values: see table

details see page 165, 167

MULTIPLIER FOR RIPPLE CURRENT (FREQUENCY COEFFICIENT)

| | | | | |
|------------------|-------|------|-------|--------|
| Frequency | 120Hz | 1kHz | 10kHz | 100kHz |
| Factor | 0,05 | 0,3 | 0,7 | 1,00 |

Multipliers for typical operating conditions.

ENVIRONMENTAL

The products are RoHS, WEEE and REACH compliant. The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

SOLID POLYMER SMD



| U _{RDC} Rated Voltage Code (V) | C _R Rated Capacitance 20°C 120Hz (µF) | ESR _{max} Equivalent Series Resistance 20°C 100kHz (mΩ) | tanδ Dissipation Factor 20°C 120Hz | I _{leak} Leakage Current (µA) | I _{max, 105°C} Max. Allowed Ripple Current ≤105°C 100kHz (mA Arms) | I _{max, 125°C} Max. Allowed Ripple Current 105°C <T<125°C 100kHz (mA Arms) | T ₀ Operating Temperature (°C) | Size øD x L (mm) | L _e Endurance Life Time U ₀ , T ₀ (h) | L _o Operational Life Time U ₀ , T ₀ , I _{max} (h) | Series | Order code | Details: Page 166 |
|---|--|--|---|--|---|---|---|----------------------------|---|--|-----------|----------------------|-------------------|
| | | | | | | | | | | | | | |
| 2,5 OE | 220 | 20 | 0,12 | 110 | 2800 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV0EVC221MF60FV-WE3 | |
| | | 35 | 0,12 | 110 | 2500 | 770* | 125 | 6,3 x 5,7 | 1000 | 100 | PC HVG VG | PCV0EVG221MF60FV-WE3 | |
| | 330 | 14 | 0,12 | 165 | 3160 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV0EVM331MF60FV-WE3 | |
| | 390 | 11 | 0,12 | 195 | 3900 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVX VX | PCV0EVX391MF60FV-WE3 | |
| | 470 | 13 | 0,12 | 235 | 3600 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV0EVM471MF60FV-WE3 | |
| | | 13 | 0,12 | 280 | 3600 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV0EVM561MF60FV-WE3 | |
| | 560 | 11 | 0,12 | 280 | 4500 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVX VX | PCV0EVX561MB70FV-WE3 | |
| | | 30 | 0,12 | 280 | 3100 | 960* | 125 | 8 x 6,7 | 1000 | 100 | PC HVG VG | PCV0EVG561MB70FV-WE3 | |
| | 680 | 11 | 0,12 | 340 | 4500 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVX VX | PCV0EVX681MB70FV-WE3 | |
| | | 12 | 0,12 | 340 | 4770 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVC VC | PCV0EVC681MB12FV-WE3 | |
| | 820 | 12 | 0,12 | 410 | 4260 | - | 105 | 8 x 7,7 | 2000 | 200 | PC HVM VM | PCV0EVM821MB80FV-WE3 | |
| | | 9 | 0,12 | 410 | 5400 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVM VM | PCV0EVM821MB12FV-WE3 | |
| | 1 000 | 12 | 0,12 | 500 | 4260 | - | 105 | 8 x 7,7 | 2000 | 200 | PC HVM VM | PCV0EVM102MB80FV-WE3 | |
| | 1 200 | 13 | 0,12 | 600 | 4450 | - | 105 | 10 x 8 | 2000 | 200 | PC HVM VM | PCV0EVM122MC80FV-WE3 | |
| | 1 500 | 10 | 0,12 | 750 | 5220 | - | 105 | 8 x 10 | 2000 | 200 | PC HVM VM | PCV0EVM152MB10FV-WE3 | |
| | | 10 | 0,12 | 750 | 5500 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVC VC | PCV0EVC152MC12FV-WE3 | |
| | 2 200 | 10 | 0,12 | 1100 | 5500 | - | 105 | 10 x 10 | 2000 | 200 | PC HVM VM | PCV0EVM222MC10FV-WE3 | |
| | 2 700 | 9 | 0,12 | 1350 | 5600 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVM VM | PCV0EVM272MC12FV-WE3 | |
| 4,0 OG | 100 | 22 | 0,12 | 80 | 2600 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV0GVC101MF60FV-WE3 | |
| | | 22 | 0,12 | 120 | 2800 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV0GVC151MF60FV-WE3 | |
| | 150 | 22 | 0,12 | 120 | 2570 | - | 105 | 6,3 x 5,7 | 5000 | 500 | PC HVS SV | PCV0GSV151MF60FV-WE3 | |
| | | 35 | 0,12 | 120 | 2450 | 770* | 125 | 6,3 x 5,7 | 1000 | 100 | PC HVG VG | PCV0GVG151MF60FV-WE3 | |
| | 220 | 21 | 0,12 | 176 | 3220 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVC VC | PCV0GVC221MB70FV-WE3 | |
| | | 30 | 0,12 | 176 | 3020 | 960* | 125 | 8 x 6,7 | 1000 | 100 | PC HVG VG | PCV0GVG221MB70FV-WE3 | |
| | 270 | 15 | 0,12 | 216 | 3160 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV0GVM271MF60FV-WE3 | |
| | | 22 | 0,12 | 216 | 3220 | - | 105 | 8 x 6,7 | 5000 | 500 | PC HVS SV | PCV0GSV271MB70FV-WE3 | |
| | 330 | 11 | 0,12 | 264 | 3900 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVX VX | PCV0GVX331MF60FV-WE3 | |
| | 390 | 14 | 0,12 | 312 | 3160 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV0GVM391MF60FV-WE3 | |
| | | 11 | 0,12 | 312 | 3900 | - | 105 | 6,3 x 7,7 | 2000 | 200 | PC HVX VX | PCV0GVX391MF80FV-WE3 | |
| | 470 | 11 | 0,12 | 376 | 4500 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVX VX | PCV0GVX471MB70FV-WE3 | |
| | | 11 | 0,12 | 448 | 4500 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVX VX | PCV0GVX561MB70FV-WE3 | |
| | 560 | 22 | 0,12 | 448 | 3220 | - | 105 | 8 x 6,7 | 5000 | 500 | PC HVS SV | PCV0GSV561MB70FV-WE3 | |
| | | 9 | 0,12 | 448 | 5400 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVM VM | PCV0GVM561MB12FV-WE3 | |
| | 680 | 13 | 0,12 | 544 | 3950 | - | 105 | 8 x 7,7 | 2000 | 200 | PC HVM VM | PCV0GVM681MB80FV-WE3 | |
| | 820 | 10 | 0,12 | 656 | 5500 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVC VC | PCV0GVC821MC12FV-WE3 | |
| | 1 000 | 10 | 0,12 | 800 | 5220 | - | 105 | 8 x 10 | 2000 | 200 | PC HVM VM | PCV0GVM102MB10FV-WE3 | |
| | 1 200 | 9 | 0,12 | 960 | 5400 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVM VM | PCV0GVM122MB12FV-WE3 | |
| | | 10 | 0,12 | 960 | 5500 | - | 105 | 10 x 10 | 2000 | 200 | PC HVM VM | PCV0GVM122MC10FV-WE3 | |
| | 1 500 | 9 | 0,12 | 1200 | 5400 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVM VM | PCV0GVM152MB12FV-WE3 | |
| | | 10 | 0,12 | 1200 | 5500 | - | 105 | 10 x 10 | 2000 | 200 | PC HVM VM | PCV0GVM152MC10FV-WE3 | |
| | 1 800 | 10 | 0,12 | 1440 | 5500 | - | 105 | 10 x 10 | 2000 | 200 | PC HVM VM | PCV0GVM182MC10FV-WE3 | |
| | | 9 | 0,12 | 1440 | 5600 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVM VM | PCV0GVM182MC12FV-WE3 | |
| 6,3 OJ | 68 | 27 | 0,12 | 86 | 2400 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV0JVC680MF60FV-WE3 | |
| | | 23 | 0,12 | 104 | 2600 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV0JVC820MF60FV-WE3 | |
| | 82 | 40 | 0,12 | 103 | 2400 | 720* | 125 | 6,3 x 5,7 | 1000 | 100 | PC HVG VG | PCV0JVG820MF60FV-WE3 | |
| | | 23 | 0,12 | 126 | 2800 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV0JVC101MF60FV-WE3 | |
| | 100 | 40 | 0,12 | 126 | 2400 | 720* | 125 | 6,3 x 5,7 | 1000 | 100 | PC HVG VG | PCV0JVG101MF60FV-WE3 | |
| | | 17 | 0,12 | 152 | 3000 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV0JVC121MF60FV-WE3 | |
| | 120 | 22 | 0,12 | 152 | 2570 | - | 105 | 6,3 x 5,7 | 5000 | 500 | PC HVS SV | PCV0JSV121MF60FV-WE3 | |
| | | 22 | 0,12 | 189 | 3200 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVC VC | PCV0JVC151MB70FV-WE3 | |
| | 150 | 30 | 0,12 | 189 | 3020 | 960* | 125 | 8 x 6,7 | 1000 | 100 | PC HVG VG | PCV0JVG151MB70FV-WE3 | |
| | | 22 | 0,12 | 227 | 3200 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVC VC | PCV0JVC181MB70FV-WE3 | |
| | 220 | 11 | 0,12 | 277 | 3900 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVX VX | PCV0JVX221MF60FV-WE3 | |
| | | 22 | 0,12 | 278 | 2570 | - | 105 | 6,3 x 5,7 | 5000 | 500 | PC HVS SV | PCV0JSV221MF60FV-WE3 | |
| | 270 | 30 | 0,12 | 277 | 3020 | 960* | 125 | 8 x 6,7 | 1000 | 100 | PC HVG VG | PCV0JVG221MB70FV-WE3 | |
| | | 14 | 0,12 | 341 | 3160 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV0JVM271MF60FV-WE3 | |
| | 330 | 14 | 0,12 | 341 | 3470 | - | 105 | 6,3 x 7,7 | 2000 | 200 | PC HVM VM | PCV0JVM271MF80FV-WE3 | |
| | | 14 | 0,12 | 416 | 3390 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV0JVM331MF60FV-WE3 | |
| | 390 | 11 | 0,12 | 416 | 4500 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVX VX | PCV0JVX331MB70FV-WE3 | |
| | | 11 | 0,12 | 492 | 4500 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVX VX | PCV0JVX391MB70FV-WE3 | |
| | 470 | 22 | 0,12 | 492 | 3220 | - | 105 | 8 x 6,7 | 5000 | 500 | PC HVS SV | PCV0JSV391MB70FV-WE3 | |
| | | 12 | 0,12 | 492 | 4770 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVC VC | PCV0JVC391MB12FV-WE3 | |
| | 560 | 11 | 0,12 | 593 | 4500 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVX VX | PCV0JVX471MB70FV-WE3 | |
| | | 12 | 0,12 | 593 | 4770 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVC VC | PCV0JVC471MB12FV-WE3 | |
| | 560 | 14 | 0,12 | 706 | 3950 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVM VM | PCV0JVM561MB70FV-WE3 | |
| | | 12 | 0,12 | 706 | 4770 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVC VC | PCV0JVC561MB12FV-WE3 | |

*Under certain conditions the currents can reach the value of 105°C. Please ask your Jianghai Europe Sales Office for approval.

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| U _{RDC} Rated Voltage Code | C _R Rated Capacitance | ESR _{max} Equivalent Series Resistance | tanδ Dissipation Factor | I _{leak} Leakage Current | I _{max,105°C} Max. Allowed Ripple Current | I _{max,125°C} Max. Allowed Ripple Current | T ₀ Operating Temperature | Size øD x L | L _e Endurance Life Time | L _o Operational Life Time | Series | Order code | |
|--|-------------------------------------|--|----------------------------|--------------------------------------|---|---|---|----------------|--|---|-----------|----------------------|----------------------|
| (V) | (µF) | (mΩ) | 20°C 120Hz | 20°C 120Hz | ≤105°C 100kHz | 105°C <T≤125°C 100kHz | (°C) | (mm) | U _R , T ₀ (h) | U _R , T ₀ , I _{max} (h) | | Details: Page 166 | |
| 6,3 0J | 680 | 14 | 0,12 | 857 | 3950 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVM VM | PCV0JVM681MB70FV-WE3 | |
| | | 10 | 0,12 | 857 | 5500 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVC VC | PCV0JVC681MC12FV-WE3 | |
| | 820 | 12 | 0,12 | 1034 | 4770 | - | 105 | 8 x 10 | 2000 | 200 | PC HVM VM | PCV0JVM821MB10FV-WE3 | |
| | | 10 | 0,12 | 1034 | 5150 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVM VM | PCV0JVM821MB12FV-WE3 | |
| | 1 000 | 10 | 0,12 | 1034 | 5500 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVC VC | PCV0JVC821MC12FV-WE3 | |
| | | 10 | 0,12 | 1260 | 5150 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVM VM | PCV0JVM102MB12FVWE3 | |
| | 1 200 | 10 | 0,12 | 1260 | 5500 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVC VC | PCV0JVC102MC12FV-WE3 | |
| | | 12 | 0,12 | 1512 | 5025 | - | 105 | 10 x 10 | 2000 | 200 | PC HVM VM | PCV0JVM122MC10FV-WE3 | |
| | 1 500 | 12 | 0,12 | 1890 | 5025 | - | 105 | 10 x 10 | 2000 | 200 | PC HVM VM | PCV0JVM152MC10FV-WE3 | |
| | | 10 | 0,12 | 1890 | 5500 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVM VM | PCV0JVM152MC12FV-WE3 | |
| 10 1A | 47 | 26 | 0,12 | 94 | 2600 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV1AVC470MF60FV-WE3 | |
| | 56 | 25 | 0,12 | 112 | 2500 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV1AVC560MF60FV-WE3 | |
| | | 45 | 0,12 | 112 | 2250 | 680* | 125 | 6,3 x 5,7 | 1000 | 100 | PC HVG VG | PCV1AVG560MF60FV-WE3 | |
| | 68 | 30 | 0,12 | 136 | 2200 | - | 105 | 6,3 x 5,7 | 5000 | 500 | PC HVS SV | PCV1ASV680MF60FV-WE3 | |
| | 120 | 15 | 0,12 | 240 | 3200 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVX VX | PCV1AVX121MF60FV-WE3 | |
| | | 27 | 0,12 | 240 | 2320 | - | 105 | 6,3 x 5,7 | 5000 | 500 | PC HVS SV | PCV1ASV121MF60FV-WE3 | |
| | | 35 | 0,12 | 240 | 2800 | 880* | 125 | 8 x 6,7 | 1000 | 100 | PC HVG VG | PCV1AVG121MB70FV-WE3 | |
| | 150 | 18 | 0,12 | 300 | 2900 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV1AVM151MF60FV-WE3 | |
| | | 23 | 0,12 | 300 | 3200 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVC VC | PCV1AVC151MB70FV-WE3 | |
| | | 30 | 0,12 | 300 | 2760 | - | 105 | 8 x 6,7 | 5000 | 500 | PC HVS SV | PCV1ASV151MB70FV-WE3 | |
| | | 35 | 0,12 | 300 | 2800 | 880* | 125 | 8 x 6,7 | 1000 | 100 | PC HVG VG | PCV1AVG151MB70FV-WE3 | |
| | 180 | 18 | 0,12 | 360 | 2900 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV1AVM181MF60FV-WE3 | |
| | 220 | 18 | 0,12 | 440 | 2900 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV1AVM221MF60FV-WE3 | |
| | | 15 | 0,12 | 440 | 3800 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVX VX | PCV1AVX221MB70FV-WE3 | |
| | 270 | 15 | 0,12 | 540 | 3800 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVX VX | PCV1AVX271MB70FV-WE3 | |
| | | 13 | 0,12 | 540 | 4500 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVC VC | PCV1AVC271MB12FV-WE3 | |
| | 330 | 15 | 0,12 | 660 | 3800 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVX VX | PCV1AVX331MB70FV-WE3 | |
| | | 35 | 0,12 | 660 | 2800 | 880* | 125 | 8 x 6,7 | 1000 | 100 | PC HVG VG | PCV1AVG331MB70FV-WE3 | |
| | | 14 | 0,12 | 660 | 4420 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVC VC | PCV1AVC331MB12FV-WE3 | |
| | 390 | 17 | 0,12 | 780 | 4000 | - | 105 | 8 x 10 | 2000 | 200 | PC HVM VM | PCV1AVM391MB10FV-WE3 | |
| | 470 | 19 | 0,12 | 940 | 3800 | - | 105 | 10 x 8 | 2000 | 200 | PC HVM VM | PCV1AVM471MC80FV-WE3 | |
| | | 12 | 0,12 | 940 | 5300 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVC VC | PCV1AVC471MC12FV-WE3 | |
| | 560 | 12 | 0,12 | 1120 | 5300 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVC VC | PCV1AVC561MC12FV-WE3 | |
| | 680 | 13 | 0,12 | 1360 | 4820 | - | 105 | 10 x 10 | 2000 | 200 | PC HVM VM | PCV1AVM681MC10FV-WE3 | |
| | 16 1C | 33 | 31 | 0,12 | 106 | 2400 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV1CVC330MF60FV-WE3 |
| | | | 24 | 0,12 | 125 | 2500 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV1CVC390MF60FV-WE3 |
| | | 39 | 37 | 0,12 | 125 | 2050 | - | 105 | 6,3 x 5,7 | 5000 | 500 | PC HVS SV | PCV1CSV390MF60FV-WE3 |
| | | | 50 | 0,12 | 125 | 2050 | 650* | 125 | 6,3 x 5,7 | 1000 | 100 | PC HVG VG | PCV1AVG390MF60FV-WE3 |
| 47 | | 24 | 0,12 | 151 | 2500 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV1CVC470MF60FV-WE3 | |
| 56 | | 25 | 0,12 | 180 | 2440 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV1CVM560MF60FV-WE3 | |
| | | 30 | 0,12 | 180 | 2900 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVC VC | PCV1CVC560MB70FV-WE3 | |
| 68 | | 25 | 0,12 | 218 | 2440 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV1CVM680MF60FV-WE3 | |
| | | 30 | 0,12 | 218 | 2200 | - | 105 | 6,3 x 5,7 | 5000 | 500 | PC HVS SV | PCV1CSV680MF60FV-WE3 | |
| 82 | | 24 | 0,12 | 263 | 2700 | - | 105 | 6,3 x 7,7 | 2000 | 200 | PC HVM VM | PCV1CVM820MF80FV-WE3 | |
| | | 28 | 0,12 | 263 | 3200 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVC VC | PCV1CVC820MB70FV-WE3 | |
| | | 30 | 0,12 | 263 | 2760 | - | 105 | 8 x 6,7 | 5000 | 500 | PC HVS SV | PCV1CSV820MB70FV-WE3 | |
| | | 40 | 0,12 | 262 | 2700 | 830* | 125 | 8 x 6,7 | 1000 | 100 | PC HVG VG | PCV1CVG820MB70FV-WE3 | |
| 100 | | 24 | 0,12 | 320 | 2490 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVM VM | PCV1CVM101MF60FV-WE3 | |
| | | 24 | 0,12 | 320 | 3010 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVM VM | PCV1CVM101MB70FV-WE3 | |
| 120 | | 24 | 0,12 | 384 | 3010 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVM VM | PCV1CVM121MB70FV-WE3 | |
| | | 27 | 0,12 | 384 | 2900 | - | 105 | 8 x 6,7 | 5000 | 500 | PC HVS SV | PCV1CSV121MB70FV-WE3 | |
| 150 | | 25 | 0,12 | 480 | 2800 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1CVF151MF60FV-WE3 | |
| | | 22 | 0,12 | 480 | 3220 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVM VM | PCV1CVM151MB70FV-WE3 | |
| | | 25 | 0,12 | 576 | 2800 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1CVF181MF60FV-WE3 | |
| 180 | | 18 | 0,12 | 576 | 3890 | - | 105 | 8 x 10 | 2000 | 200 | PC HVM VM | PCV1CVM181MB10FV-WE3 | |
| | | 16 | 0,12 | 576 | 4400 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVC VC | PCV1CVC181MB12FV-WE3 | |
| | | 22 | 0,12 | 704 | 3220 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVM VM | PCV1CVM221MB70FV-WE3 | |
| 220 | | 18 | 0,12 | 704 | 3890 | - | 105 | 8 x 10 | 2000 | 200 | PC HVM VM | PCV1CVM221MB10FV-WE3 | |
| | | 16 | 0,12 | 704 | 4400 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVC VC | PCV1CVC221MB12FV-WE3 | |
| | | 14 | 0,12 | 704 | 5050 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVC VC | PCV1CVC221MC12FV-WE3 | |
| | | 22 | 0,12 | 864 | 3300 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1CVF271MB70FV-WE3 | |
| 270 | | 14 | 0,12 | 864 | 4350 | - | 105 | 8 x 12,2 | 5000 | 500 | PC HVS SV | PCV1CSV271MB12FV-WE3 | |
| | | 22 | 0,12 | 1056 | 3300 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1CVF331MB70FV-WE3 | |
| 330 | | 16 | 0,12 | 1056 | 4350 | - | 105 | 10 x 10 | 2000 | 200 | PC HVM VM | PCV1CVM331MC10FV-WE3 | |
| | | 14 | 0,12 | 1056 | 5050 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVC VC | PCV1CVC331MC12FV-WE3 | |

*Under certain conditions the currents can reach the value of 105°C. Please ask your Jianghai Europe Sales Office for approval.



| U _{RDC} Rated Voltage Code | C _R Rated Capacitance | ESR _{max} Equivalent Series Resistance | tanδ Dissipation Factor | I _{leak} Leakage Current | I _{max, 105°C} Max. Allowed Ripple Current | I _{max, 125°C} Max. Allowed Ripple Current | T ₀ Operating Temperature | Size øD x L | L _e Endurance Life Time | L _o Operational Life Time | Series | Order code | |
|--|-------------------------------------|--|----------------------------|--------------------------------------|--|--|---|----------------|--|---|-----------|-----------------------|----------------------|
| (V) | (µF) | (mΩ) | 20°C 120Hz | (µA) | <105°C 100kHz | 105°C <T<125°C 100kHz | (°C) | (mm) | U ₀ , T ₀ (h) | U ₀ , T ₀ , I _{max} (h) | | Details: Page 166 | |
| 16 1C | 470 | 14 | 0,12 | 1504 | 4950 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1CVF471MB12FV-WE3 | |
| | | 17 | 0,12 | 1504 | 2500 | 750* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1CVK471MB12FV-WE3 | |
| | | 14 | 0,12 | 1504 | 5050 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVM VM | PCV1CVM471MC12FV-WE3 | |
| | 560 | 14 | 0,12 | 1792 | 4950 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1CVF561MB12FV-WE3 | |
| | | 17 | 0,12 | 1792 | 2500 | 750* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1CVK561MB12FV-WE3 | |
| | 680 | 14 | 0,12 | 2176 | 4950 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1CVF681MB12FV-WE3 | |
| | 820 | 14 | 0,12 | 2624 | 5050 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVM VM | PCV1CVM821MC12FV-WE3 | |
| | 1 000 | 12 | 0,12 | 3200 | 5400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1CVF102MC12FV-WE3 | |
| | | 15 | 0,12 | 3200 | 2700 | 810* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1CVK102MC12FV-WE3 | |
| | 1 200 | 12 | 0,12 | 3840 | 5400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1CVF122MC12FV-WE3 | |
| 20 1D | 22 | 35 | 0,12 | 88 | 2040 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV1DVC220MF60FV-WE3 | |
| | | 60 | 0,10 | 88 | 1450 | - | 105 | 6,3 x 5,7 | 5000 | 500 | PC HVS SV | PCV1DSV220MF60FV-WE3 | |
| | | 60 | 0,12 | 88 | 1650 | 590* | 125 | 6,3 x 5,7 | 1000 | 100 | PC HVG VG | PCV1DVG620MF60FV-WE3 | |
| | 27 | 35 | 0,12 | 108 | 2040 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV1DVC270MF60FV-WE3 | |
| | 33 | 45 | 0,12 | 132 | 2000 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVC VC | PCV1DVC330MB70FV-WE3 | |
| | 39 | 45 | 0,12 | 156 | 2000 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVC VC | PCV1DVC390MB70FV-WE3 | |
| | 47 | 33 | 0,12 | 188 | 2630 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVC VC | PCV1DVC470MB70FV-WE3 | |
| | | 45 | 0,12 | 188 | 1890 | - | 105 | 8 x 6,7 | 5000 | 500 | PC HVS SV | PCV1DSV470MB70FV-WE3 | |
| | | 45 | 0,12 | 188 | 2000 | 780* | 125 | 8 x 6,7 | 1000 | 100 | PC HVG VG | PCV1DVG470MB70FV-WE3 | |
| | 100 | 22 | 0,12 | 400 | 3320 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVC VC | PCV1DVC101MB12FV-WE3 | |
| | 120 | 28 | 0,12 | 480 | 2650 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1DVF121MF60FV-WE3 | |
| | | 34 | 0,12 | 480 | 1300 | 390* | 125 | 6,3 x 5,7 | 2000 | 200 | PC HVK VK | PCV1DVK121MF60FV-WE3 | |
| | 150 | 28 | 0,12 | 600 | 2650 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1DVF151MF60FV-WE3 | |
| | | 20 | 0,12 | 600 | 4320 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVC VC | PCV1DVC151MC12FV-WE3 | |
| | 180 | 29 | 0,12 | 720 | 1600 | 480* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1DVK181MB70FV-WE3 | |
| | 220 | 24 | 0,12 | 880 | 3200 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1DVF221MB70FV-WE3 | |
| | | 29 | 0,12 | 880 | 1600 | 480* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1DVK221MB70FV-WE3 | |
| | 270 | 24 | 0,12 | 1080 | 3200 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1DVF271MB70FV-WE3 | |
| | 390 | 14 | 0,12 | 1560 | 4950 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1DVF391MB12FV-WE3 | |
| | | 17 | 0,12 | 1560 | 2400 | 720* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1DVK391MB12FV-WE3 | |
| | 470 | 14 | 0,12 | 1880 | 4950 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1DVF471MB12FV-WE3 | |
| | 560 | 14 | 0,12 | 2240 | 4950 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1DVF561MB12FV-WE3 | |
| | | 12 | 0,12 | 2240 | 5400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1DVF561MC12FV-WE3 | |
| | 680 | 12 | 0,12 | 2720 | 5400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1DVF681MC12FV-WE3 | |
| | | 15 | 0,12 | 2720 | 2600 | 780* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1DVK681MC12FV-WE3 | |
| | 820 | 12 | 0,12 | 3280 | 5400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1DVF821MC12FV-WE3 | |
| | 25 1E | 10 | 65 | 0,12 | 50 | 1500 | - | 105 | 6,3 x 5,7 | 2000 | 200 | PC HVC VC | PCV1EVC100MF60FV-WE3 |
| | | | 60 | 0,12 | 50 | 1600 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVC VC | PCV1EVC100MB70FV-WE3 |
| | | | 60 | 0,10 | 125 | 1500 | - | 105 | 8 x 6,7 | 5000 | 500 | PC HVS SV | PCV1ESV100MB70FV-WE3 |
| | | 22 | 50 | 0,12 | 110 | 1800 | - | 105 | 8 x 6,7 | 2000 | 200 | PC HVC VC | PCV1EVC220MB70FV-WE3 |
| 33 | | 30 | 0,12 | 165 | 3000 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVC VC | PCV1EVC330MB12FV-WE3 | |
| 47 | | 42 | 0,12 | 235 | 1175 | 350* | 125 | 6,3 x 5,7 | 2000 | 200 | PC HVK VK | PCV1EVK470MF60FV-WE3 | |
| | | 30 | 0,12 | 235 | 3000 | - | 105 | 8 x 12,2 | 2000 | 200 | PC HVC VC | PCV1EVC470MB12FV-WE3 | |
| 56 | | 28 | 0,12 | 280 | 3800 | - | 105 | 10 x 12,2 | 2000 | 200 | PC HVC VC | PCV1EVC560MC12FV-WE3 | |
| 82 | | 36 | 0,12 | 410 | 1255 | 375* | 125 | 6,3 x 5,7 | 2000 | 200 | PC HVK VK | PCV1EVK820MF60FV-WE3 | |
| 100 | | 30 | 0,12 | 500 | 2550 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1EVF101MF60FV50WE3 | |
| | | 36 | 0,12 | 500 | 1255 | 375* | 125 | 6,3 x 5,7 | 2000 | 200 | PC HVK VK | PCV1EVK101MF60FV-WE3 | |
| 120 | | 30 | 0,12 | 600 | 2550 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1EVF121MF60FV-WE3 | |
| 150 | | 29 | 0,12 | 750 | 1600 | 480* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1EVK151MB70FV-WE3 | |
| 180 | | 24 | 0,12 | 900 | 3200 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1EVF181MB70FV-WE3 | |
| | | 29 | 0,12 | 900 | 1600 | 480* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1EVK181MB70FV-WE3 | |
| 220 | | 24 | 0,12 | 1100 | 3200 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1EVF221MB70FV-WE3 | |
| 330 | | 16 | 0,12 | 1650 | 4650 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1EVF331MB12FV-WE3 | |
| | | 19 | 0,12 | 1650 | 2325 | 700* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1EVK331MB12FV-WE3 | |
| 390 | | 16 | 0,12 | 1950 | 4650 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1EVF391MB12FV-WE3 | |
| | | 19 | 0,12 | 1950 | 2325 | 700* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1EVK391MB12FV-WE3 | |
| 470 | | 16 | 0,12 | 2350 | 4650 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1EVF471MB12FV-WE3 | |
| | | 14 | 0,12 | 2350 | 5000 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1EVF471MC12FV-WE3 | |
| 560 | | 17 | 0,12 | 2350 | 2500 | 750* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1EVK471MC12FV-WE3 | |
| | | 14 | 0,12 | 2800 | 5000 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1EVF561MC12FV-WE3 | |
| | | 17 | 0,12 | 2800 | 2500 | 750* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1EVK561MC12FV-WE3 | |
| 680 | | 14 | 0,12 | 3400 | 5000 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1EVF681MC12FV-WE3 | |

*Under certain conditions the currents can reach the value of 105°C. Please ask your Jianghai Europe Sales Office for approval.

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| U _{RDC} Rated Voltage Code (V) | C _R Rated Capacitance (µF) | ESR _{max} Equivalent Series Resistance (mΩ) | tanδ Dissipation Factor (20°C 120Hz) | I _{leak} Leakage Current (µA) | I _{max,105°C} Max. Allowed Ripple Current (mA Arms) | I _{max,125°C} Max. Allowed Ripple Current (mA Arms) | T ₀ Operating Temperature (°C) | Size øD x L (mm) | L _e Endurance Life Time (h) | L _o Operational Life Time (h) | Series | Order code |
|---|---|--|--|--|--|--|---|------------------------|--|--|----------------------|----------------------|
| Details: Page 166 | | | | | | | | | | | | |
| 28 1L | 82 | 33 | 0,12 | 460 | 2450 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1LVF820MF60FV-WE3 |
| | 150 | 28 | 0,12 | 840 | 2950 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1LVF151MB70FV-WE3 |
| | 270 | 18 | 0,12 | 1512 | 4350 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1LVF271MB12FV-WE3 |
| | 330 | 18 | 0,12 | 1848 | 4350 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1LVF331MB12FV-WE3 |
| | 470 | 16 | 0,12 | 2632 | 4650 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1LVF471MC12FV-WE3 |
| | 560 | 16 | 0,12 | 3136 | 4650 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1LVF561MC12FV-WE3 |
| 32 1F | 68 | 35 | 0,12 | 436 | 2350 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1FVF680MF60FV-WE3 |
| | 120 | 30 | 0,12 | 768 | 2800 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1FVF121MB70FV-WE3 |
| | 220 | 20 | 0,12 | 1408 | 4000 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1FVF221MB12FV-WE3 |
| | 270 | 20 | 0,12 | 1728 | 4000 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1FVF271MB12FV-WE3 |
| | 390 | 18 | 0,12 | 2496 | 4400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1FVF391MC12FV-WE3 |
| | 470 | 18 | 0,12 | 3008 | 4400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1FVF471MC12FV-WE3 |
| 35 1V | 47 | 35 | 0,12 | 329 | 2350 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1VVF470MF60FV-WE3 |
| | | 42 | 0,12 | 329 | 1175 | 350* | 125 | 6,3 x 5,7 | 2000 | 200 | PC HVK VK | PCV1VVK470MF60FV-WE3 |
| | 56 | 35 | 0,12 | 392 | 2350 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1VVF560MF60FV-WE3 |
| | | 42 | 0,12 | 392 | 1175 | 350* | 125 | 6,3 x 5,7 | 2000 | 200 | PC HVK VK | PCV1VVK560MF60FV-WE3 |
| | 82 | 36 | 0,12 | 574 | 1400 | 420* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1VVK820MB70FV-WE3 |
| | | 30 | 0,12 | 700 | 2800 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1VVF101MB70FV-WE3 |
| | 100 | 36 | 0,12 | 700 | 1400 | 420* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1VVK101MB70FV-WE3 |
| | | 20 | 0,12 | 1260 | 4000 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1VVF181MB12FV-WE3 |
| | 180 | 24 | 0,12 | 1260 | 2000 | 600* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1VVK181MB12FV-WE3 |
| | | 20 | 0,12 | 1540 | 4000 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1VVF221MB12FV-WE3 |
| | 220 | 24 | 0,12 | 1540 | 2000 | 600* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1VVK221MB12FV-WE3 |
| | | 22 | 0,12 | 1890 | 2200 | 660* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1VVK271MC12FV-WE3 |
| | 330 | 18 | 0,12 | 2310 | 4400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1VVF331MC12FV-WE3 |
| | | 22 | 0,12 | 2310 | 2200 | 660* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1VVK331MC12FV-WE3 |
| 390 | 18 | 0,12 | 2730 | 4400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1VVF391MC12FV-WE3 | |
| 40 1G | 33 | 40 | 0,12 | 264 | 2200 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1GVF330MF60FV-WE3 |
| | | 45 | 0,12 | 264 | 1150 | 345* | 125 | 6,3 x 5,7 | 2000 | 200 | PC HVK VK | PCV1GVK330MF60FV-WE3 |
| | 39 | 37 | 0,12 | 312 | 2300 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1GVF390MF60FV-WE3 |
| | | 45 | 0,12 | 312 | 1150 | 345* | 125 | 6,3 x 5,7 | 2000 | 200 | PC HVK VK | PCV1GVK390MF60FV-WE3 |
| | 68 | 38 | 0,12 | 544 | 1350 | 400* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1GVK680MB70FV-WE3 |
| | | 32 | 0,12 | 656 | 2700 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1GVF820MB70FV-WE3 |
| | 82 | 38 | 0,12 | 656 | 1350 | 400* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1GVK820MB70FV-WE3 |
| | | 21 | 0,12 | 1200 | 3900 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1GVF151MB12FV-WE3 |
| | 150 | 25 | 0,12 | 1200 | 1950 | 585* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1GVK151MB12FV-WE3 |
| | | 18 | 0,12 | 1760 | 4400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1GVF221MC12FV-WE3 |
| | 220 | 22 | 0,12 | 1760 | 2200 | 660* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1GVK221MC12FV-WE3 |
| | | 18 | 0,12 | 2160 | 4400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1GVF271MC12FV-WE3 |
| | 270 | 22 | 0,12 | 2160 | 2200 | 660* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1GVK271MC12FV-WE3 |
| | | 18 | 0,12 | 2640 | 4400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1GVF331MC12FV-WE3 |
| 50 1H | 18 | 48 | 0,12 | 180 | 1100 | 330* | 125 | 6,3 x 5,7 | 2000 | 200 | PC HVK VK | PCV1HVK180MF60FV-WE3 |
| | | 40 | 0,12 | 220 | 2200 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1HVF220MF60FV-WE3 |
| | 22 | 48 | 0,12 | 220 | 1100 | 330* | 125 | 6,3 x 5,7 | 2000 | 200 | PC HVK VK | PCV1HVK220MF60FV-WE3 |
| | | 35 | 0,12 | 330 | 2600 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1HVF330MB70FV-WE3 |
| | 33 | 42 | 0,12 | 330 | 1300 | 390* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1HVK330MB70FV-WE3 |
| | | 35 | 0,12 | 390 | 2600 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1HVF390MB70FV-WE3 |
| | 39 | 42 | 0,12 | 390 | 1300 | 390* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1HVK390MB70FV-WE3 |
| | | 25 | 0,12 | 820 | 3800 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1HVF820MB12FV-WE3 |
| | 82 | 20 | 0,12 | 820 | 1900 | 570* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1HVK820MB12FV-WE3 |
| | | 25 | 0,12 | 1000 | 3800 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1HVF101MB12FV-WE3 |
| | 100 | 30 | 0,12 | 1000 | 1900 | 570* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1HVK101MB12FV-WE3 |
| | | 20 | 0,12 | 1000 | 4300 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1HVF101MC12FV-WE3 |
| | | 24 | 0,12 | 1000 | 2150 | 645* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1HVK101MC12FV-WE3 |
| | 120 | 20 | 0,12 | 1200 | 4300 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1HVF121MC12FV-WE3 |
| 24 | | 0,12 | 1200 | 2150 | 645* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1HVK121MC12FV-WE3 | |
| 150 | 20 | 0,12 | 1500 | 4300 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1HVF151MC12FV-WE3 | |
| | 24 | 0,12 | 1500 | 2150 | 645* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1HVK151MC12FV-WE3 | |

*Under certain conditions the currents can reach the value of 105°C. Please ask your Jianghai Europe Sales Office for approval.

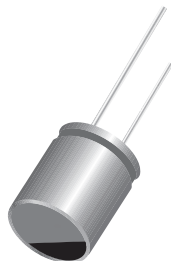


| U _{RDC} Rated Voltage Code | C _R Rated Capacitance | ESR _{max} Equivalent Series Resistance | tanδ Dissipation Factor | I _{leak} Leakage Current | I _{max, 105°C} Max. Allowed Ripple Current | I _{max, 125°C} Max. Allowed Ripple Current | T ₀ Operating Temperature | Size øD x L | L _e Endurance Life Time | L _o Operational Life Time | Series | Order code |
|--|-------------------------------------|--|----------------------------|--------------------------------------|--|--|---|----------------|--|---|----------------------|----------------------|
| (V) | (µF) | (mΩ) | | (µA) | <105°C 100kHz | 105°C <T<125°C 100kHz | (°C) | (mm) | U _R , T ₀ (h) | U _R , T ₀ , I _{max} (h) | | Details: Page 166 |
| 63 1J | 10 | 50 | 0,12 | 126 | 1950 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1JVF100MF60FV-WE3 |
| | 12 | 50 | 0,12 | 152 | 1950 | - | 105 | 6,3 x 5,7 | 3000 | 300 | PC HVF VF | PCV1JVF120MF60FV-WE3 |
| | 22 | 45 | 0,12 | 278 | 2350 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1JVF220MF70FV-WE3 |
| | | 54 | 0,12 | 278 | 1175 | 355* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1JVK220MB70FV-WE3 |
| | 27 | 45 | 0,12 | 341 | 2350 | - | 105 | 8 x 6,7 | 3000 | 300 | PC HVF VF | PCV1JVF270MB70FV-WE3 |
| | | 54 | 0,12 | 341 | 1175 | 355* | 125 | 8 x 6,7 | 2000 | 200 | PC HVK VK | PCV1JVK270MB70FV-WE3 |
| | 47 | 26 | 0,12 | 593 | 3600 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1JVF470MB12FV-WE3 |
| | | 31 | 0,12 | 593 | 1800 | 540* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1JVK470MB12FV-WE3 |
| | 56 | 26 | 0,12 | 706 | 3600 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1JVF560MB12FV-WE3 |
| | | 31 | 0,12 | 706 | 1800 | 540* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1JVK560MB12FV-WE3 |
| | | 22 | 0,12 | 706 | 4100 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1JVF560MC12FV-WE3 |
| | 68 | 22 | 0,12 | 857 | 4100 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1JVF680MC12FV-WE3 |
| | 82 | 22 | 0,12 | 1034 | 4100 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1JVF820MC12FV-WE3 |
| | | 27 | 0,12 | 1034 | 2000 | 600* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1JVK820MC12FV-WE3 |
| 100 | 22 | 0,12 | 1260 | 4100 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1JVF101MC12FV-WE3 | |
| | 27 | 0,12 | 1260 | 2000 | 600* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1JVK101MC12FV-WE3 | |
| 80 1K | 33 | 32 | 0,12 | 528 | 3200 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1KVF330MB12FV-WE3 |
| | | 38 | 0,12 | 528 | 1600 | 480* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1KVK330MB12FV-WE3 |
| | 39 | 32 | 0,12 | 624 | 3200 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV1KVF390MB12FV-WE3 |
| | | 38 | 0,12 | 624 | 1600 | 480* | 125 | 8 x 12,2 | 2000 | 200 | PC HVK VK | PCV1KVK390MB12FV-WE3 |
| | 47 | 28 | 0,12 | 752 | 3600 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1KVF470MC12FV-WE3 |
| | | 34 | 0,12 | 752 | 1800 | 540* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1KVK470MC12FV-WE3 |
| | 56 | 28 | 0,12 | 896 | 3600 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV1KVF560MC12FV-WE3 |
| | | 34 | 0,12 | 896 | 1800 | 540* | 125 | 10 x 12,2 | 2000 | 200 | PC HVK VK | PCV1KVK560MC12FV-WE3 |
| 100 2A | 12 | 36 | 0,12 | 240 | 3000 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV2AVF120MB12FV-WE3 |
| | 15 | 36 | 0,12 | 300 | 3000 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV2AVF150MB12FV-WE3 |
| | 22 | 32 | 0,12 | 440 | 3300 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV2AVF220MC12FV-WE3 |
| | 27 | 32 | 0,12 | 540 | 3300 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV2AVF270MC12FVWE3 |
| 125 2B | 10 | 45 | 0,12 | 250 | 2700 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV2BVF100MB12FV-WE3 |
| | 12 | 45 | 0,12 | 300 | 2700 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV2BVF120MB12FV-WE3 |
| | 18 | 40 | 0,12 | 450 | 3000 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV2BVF180MC12FV-WE3 |
| | 22 | 40 | 0,12 | 550 | 3000 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV2BVF220MC12FV-WE3 |
| 160 2C | 8,2 | 70 | 0,12 | 263 | 2100 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV2CVF8R2MB12FV-WE3 |
| | 10 | 60 | 0,12 | 320 | 2400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV2CVF100MC12FV-WE3 |
| | 12 | 60 | 0,12 | 384 | 2400 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV2CVF120MC12FV-WE3 |
| 200 2D | 4,7 | 120 | 0,12 | 188 | 1600 | - | 105 | 8 x 12,2 | 3000 | 300 | PC HVF VF | PCV2DVF4R7MB12FV-WE3 |
| | 8,2 | 100 | 0,12 | 328 | 1850 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV2DVF8R2MC12FV-WE3 |
| | 10 | 100 | 0,12 | 400 | 1850 | - | 105 | 10 x 12,2 | 3000 | 300 | PC HVF VF | PCV2DVF100MC12FV-WE3 |

*Under certain conditions the currents can reach the value of 105°C. Please ask your Jianghai Europe Sales Office for approval.

2 000 - 5 000h
at 105°C/125°C

- Low ESR
- Solid Polymeric Electrolyte



ITEM CHARACTERISTICS

| | |
|-------------------------------------|--|
| Operating Temperature Range (°C) | -55 ~ +105/125 (see table) |
| Voltage Range (V) | 2,5 ~ 200 |
| Capacitance Range (µF) | 1,0 ~ 2 700 |
| Capacitance Tolerance (20°C, 120Hz) | ± 20% |
| Surge Voltage (V) | $U_R * 1,15$ |
| Dissipation Factor | at 20°C, 120Hz, see table |
| Leakage Current (µA) | at 20°C after 2 minutes |
| Temperature Stability | $Z_{105°C} / Z_{20°C} \leq 1,25$ for 105°C capacitors |
| | $Z_{125°C} / Z_{+20°C} \leq 1,25$ for 125°C capacitors |
| | $Z_{-55°C} / Z_{+20°C} \leq 1,25$ |

! The usage at lower temperatures than indicated may be possible. Please contact the Jianghai Europe sales office for approval.

| ITEM | ENDURANCE LIFETIME L_e | OPERATIONAL LIFETIME L_o | DAMP HEAT (Steady State) | RESISTANCE TO SOLDERING HEAT RADIAL |
|--------------------|---|---|--|--|
| Lifetime | 1 000h ~ 5 000h* | 100h ~ 500h* | 1 000h | 10sec, Wave |
| Leakage Current | ≤ the specified value | ≤ the specified value | ≤ the specified value (after voltage processing) | ≤ the specified value (after voltage processing) |
| Capacitance Change | Within ± 20% of initial value | Within ± 20% of initial value | Within ± 20% of initial value | Within ± 5% of initial value |
| Dissipation Factor | ≤ 150% of specified value | ≤ 150% of specified value | ≤ 150% of specified value | ≤ specified value |
| ESR Change | ≤ 150% of specified value | ≤ 150% of specified value | ≤ 150% of specified value | ≤ specified value |
| Condition | T_0 (upper category temperature) U_R $I_R = 0$ | T_0 (upper category temperature) U_R I_R | 60°C (90-95% relative humidity) $U_R = 0$ $I_R = 0$ | 260°C±5°C |

*concrete values: see table

*concrete values: see table

details see page 165, 168

MULTIPLIER FOR RIPPLE CURRENT (FREQUENCY COEFFICIENT)

| | | | | |
|-----------|-------|------|-------|--------|
| Frequency | 120Hz | 1kHz | 10kHz | 100kHz |
| Factor | 0,05 | 0,30 | 0,70 | 1,00 |

Multipliers for typical operating conditions.

ENVIRONMENTAL

The products are RoHS, WEEE and REACH compliant. The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com



| U _{RDC} Rated Voltage Code | C _R Rated Capacitance | ESR _{max} Equivalent Series Resistance | tanδ Dissipation Factor | I _{leak} Leakage Current | I _{max, 105°C} Max. Allowed Ripple Current | I _{max, 125°C} Max. Allowed Ripple Current | T ₀ Operating Temperature | Size øD x L | L _e Endurance Life Time | L _o Operational Life Time | Series | Ordercode |
|--|-------------------------------------|--|----------------------------|--------------------------------------|--|--|---|----------------|---------------------------------------|---|-----------------------|--|
| (V) | (µF) | (mΩ) | | (µA) | (mArms) | (mArms) | (°C) | (mm) | (h) | (h) | | ◇◇ = pin style & length Details: Page 168 |
| 2,5 OE | 330 | 7 | 0,10 | 500 | 5600 | - | 105 | 6,3 x 8 | 5 000 | 500 | PC HCS CS | PCROECS331MF08◇◇25SE3 |
| | 390 | 20 | 0,08 | 195 | 3200 | - | 105 | 6,3 x 10 | 2 000 | 200 | PC HCN CN | PCROECN391MF10◇◇25SE3 |
| | 470 | 7 | 0,10 | 500 | 5600 | - | 105 | 6,3 x 8 | 2 000 | 200 | PC HELEL | PCROEEL471MF08◇◇25SE3 |
| | 560 | 7 | 0,10 | 500 | 5600 | - | 105 | 6,3 x 8 | 5 000 | 500 | PC HCS CS | PCROECS561MF08◇◇25SE3 |
| | | 7 | 0,08 | 500 | 6100 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN HN | PCROEHN561MB08◇◇35SE3 |
| | 680 | 7 | 0,08 | 500 | 6100 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN HN | PCROEHN681MB08◇◇35SE3 |
| | | 5 | 0,12 | 340 | 6630 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HSN SN | PCROESN681MBAB◇◇35SE3 |
| | 820 | 7 | 0,10 | 500 | 5600 | - | 105 | 6,3 x 8 | 5 000 | 500 | PC HCS CS | PCROECS821MF08◇◇25SE3 |
| | | 7 | 0,10 | 500 | 6100 | - | 105 | 8 x 8 | 5 000 | 500 | PC HCS CS | PCROECS821MB08◇◇35SE3 |
| | 1 000 | 5 | 0,12 | 410 | 6630 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HSN SN | PCROESN821MBAB◇◇35SE3 |
| | | 7 | 0,10 | 500 | 6100 | - | 105 | 8 x 8 | 5 000 | 500 | PC HCS CS | PCROECS102MB08◇◇35SE3 |
| | 1 200 | 6 | 0,08 | 500 | 6640 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCROEEN102MCAC◇◇50SE3 |
| | | 6 | 0,08 | 600 | 6640 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCROEEN122MCAC◇◇50SE3 |
| | 1 500 | 7 | 0,08 | 750 | 6100 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HEN EN | PCROEEN152MBAB◇◇35SE3 |
| | | 5 | 0,12 | 750 | 7220 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HSN SN | PCROESN152MCAC◇◇50SE3 |
| | 2 700 | 10 | 0,10 | 1350 | 5560 | - | 105 | 10 x 12,5 | 5 000 | 500 | PC HCS CS | PCROECS272MCAC◇◇50SE3 |
| 4 OG | 270 | 20 | 0,08 | 216 | 3200 | - | 105 | 6,3 x 10 | 2 000 | 200 | PC HCN CN | PCROGCN271MF10◇◇25SE3 |
| | 330 | 35 | 0,12 | 660 | 2560 | 810* | 125 | 8 x 6 | 1 000 | 100 | PC HGN GN | PCROGCN331MB06◇◇35SE3 |
| | 390 | 20 | 0,08 | 312 | 3300 | - | 105 | 6,3 x 10 | 2 000 | 200 | PC HCN CN | PCROGCN391MF10◇◇25SE3 |
| | 560 | 7 | 0,10 | 500 | 5600 | - | 105 | 6,3 x 8 | 5 000 | 500 | PC HCS CS | PCROGCS561MF08◇◇25SE3 |
| | | 7 | 0,10 | 500 | 6100 | - | 105 | 8 x 8 | 5 000 | 500 | PC HCS CS | PCROGCS561MB08◇◇35SE3 |
| | | 5 | 0,12 | 450 | 6630 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HSN SN | PCROGSN561MBAB◇◇35SE3 |
| | 680 | 13 | 0,12 | 450 | 4520 | 1430* | 125 | 8 x 11,5 | 1 000 | 100 | PC HGN GN | PCROGCN561MBAB◇◇35SE3 |
| | | 6 | 0,08 | 545 | 6100 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN NA | PCROGNA681MB08◇◇35SE3 |
| | | 7 | 0,10 | 545 | 6100 | - | 105 | 8 x 11,5 | 5 000 | 500 | PC HCS CS | PCROGCS681MBAB◇◇35SE3 |
| | 820 | 7 | 0,08 | 550 | 6100 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HEN EN | PCROGEN681MBAB◇◇35SE3 |
| | | 25 | 0,12 | 545 | 3700 | 1170* | 125 | 10 x 7 | 1 000 | 100 | PC HGN GN | PCROGCN681MC07◇◇50SE3 |
| | | 6 | 0,08 | 660 | 6100 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN NA | PCROGNA821MB08◇◇35SE3 |
| | 1 000 | 7 | 0,10 | 660 | 6640 | - | 105 | 8 x 11,5 | 5 000 | 500 | PC HCS CS | PCROGCS821MBAB◇◇35SE3 |
| | | 5 | 0,12 | 656 | 7220 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HSN SN | PCROGSN821MCAC◇◇50SE3 |
| | 1 200 | 7 | 0,08 | 800 | 6100 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HEN EN | PCROGEN102MBAB◇◇35SE3 |
| | | 6 | 0,08 | 800 | 6640 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCROGEN102MCAC◇◇50SE3 |
| 1 800 | 7 | 0,08 | 960 | 6100 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HEN EN | PCROGEN122MBAB◇◇35SE3 | |
| | 5 | 0,12 | 960 | 7220 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HSN SN | PCROGSN122MCAC◇◇50SE3 | |
| 2 200 | 12 | 0,12 | 960 | 5450 | 1740* | 125 | 10 x 12,5 | 1 000 | 100 | PC HGN GN | PCROGCN122MCAC◇◇50SE3 | |
| 6,3 OJ | 150 | 35 | 0,12 | 475 | 2560 | 810* | 125 | 8 x 6 | 1 000 | 100 | PC HGN GN | PCROJGN151MB06◇◇35SE3 |
| | 220 | 20 | 0,08 | 280 | 3200 | - | 105 | 6,3 x 10 | 2 000 | 200 | PC HCN CN | PCROJCN221MF10◇◇25SE3 |
| | 270 | 11 | 0,10 | 341 | 3700 | - | 105 | 5 x 8 | 2 000 | 200 | PC HELEL | PCROJEL271ME08◇◇20SE3 |
| | 330 | 11 | 0,10 | 420 | 3700 | - | 105 | 5 x 8 | 2 000 | 200 | PC HELEL | PCROJEL331ME08◇◇20SE3 |
| | | 7 | 0,08 | 420 | 5700 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HEN EN | PCROJEN331MBAB◇◇35SE3 |
| | | 25 | 0,12 | 416 | 3700 | 1170* | 125 | 10 x 7 | 1 000 | 100 | PC HGN GN | PCROJGN331MC07◇◇50SE3 |
| | 390 | 11 | 0,10 | 495 | 3700 | - | 105 | 5 x 8 | 2 000 | 200 | PC HELEL | PCROJEL391ME08◇◇20SE3 |
| | | 15 | 0,10 | 495 | 3900 | - | 105 | 8 x 8 | 5 000 | 500 | PC HCS CS | PCROJCS391MB08◇◇35SE3 |
| | | 5 | 0,12 | 495 | 6630 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HSN SN | PCROJSN391MBAB◇◇35SE3 |
| | 470 | 11 | 0,10 | 595 | 3700 | - | 105 | 5 x 11,0 | 2 000 | 200 | PC HELEL | PCROJEL471ME11◇◇20SE3 |
| | | 8 | 0,10 | 595 | 5600 | - | 105 | 6,3 x 8 | 5 000 | 500 | PC HCS CS | PCROJCS471MF08◇◇25SE3 |
| | | 8 | 0,10 | 595 | 5700 | - | 105 | 8 x 8 | 5 000 | 500 | PC HCS CS | PCROJCS471MB08◇◇35SE3 |
| | | 7 | 0,08 | 595 | 6100 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN NA | PCROJNA471MB08◇◇35SE3 |
| | 560 | 15 | 0,12 | 595 | 4210 | 1332* | 125 | 8 x 11,5 | 1 000 | 100 | PC HGN GN | PCROJGN471MBAB◇◇35SE3 |
| | | 8 | 0,10 | 706 | 5600 | - | 105 | 6,3 x 8 | 5 000 | 500 | PC HCS CS | PCROJCS561MF08◇◇25SE3 |
| | 680 | 7 | 0,10 | 706 | 6100 | - | 105 | 8 x 8 | 5 000 | 500 | PC HCS CS | PCROJCS561MB08◇◇35SE3 |
| 8 | | 0,10 | 860 | 5000 | - | 105 | 6,3 x 8 | 2 000 | 200 | PC HELEL | PCROJEL681MF08◇◇25SE3 | |
| 8 | | 0,08 | 860 | 5700 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN HN | PCROJHN681MB08◇◇35SE3 | |
| 7 | | 0,10 | 860 | 6640 | - | 105 | 10 x 12,5 | 5 000 | 500 | PC HCS CS | PCROJCS681MCAC◇◇50SE3 | |
| 5 | | 0,12 | 860 | 7220 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HSN SN | PCROJSN681MCAC◇◇50SE3 | |
| 820 | 12 | 0,12 | 645 | 5450 | 1740* | 125 | 10 x 12,5 | 1 000 | 100 | PC HGN GN | PCROJGN681MCAC◇◇50SE3 | |
| | 10 | 0,10 | 1035 | 4500 | - | 105 | 5,5 x 11 | 2 000 | 200 | PC HELEL | PCROJEL821MS11◇◇25SE3 | |
| | 8 | 0,10 | 1035 | 5000 | - | 105 | 6,3 x 11 | 2 000 | 200 | PC HELEL | PCROJEL821MF11◇◇25SE3 | |
| | 8 | 0,08 | 1035 | 5700 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN HN | PCROJHN821MB08◇◇35SE3 | |
| | 5 | 0,12 | 1035 | 7220 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HSN SN | PCROJSN821MCAC◇◇50SE3 | |
| 1 000 | 12 | 0,12 | 775 | 5450 | 1740* | 125 | 10 x 12,5 | 1 000 | 100 | PC HGN GN | PCROJGN821MCAC◇◇50SE3 | |
| | 8 | 0,10 | 1260 | 5000 | - | 105 | 6,3 x 11 | 2 000 | 200 | PC HELEL | PCROJEL102MF11◇◇25SE3 | |
| | 8 | 0,08 | 1260 | 5700 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN HN | PCROJHN102MB08◇◇35SE3 | |

*Under certain conditions the currents can reach the value of 105°C. Please ask your Jianghai Europe Sales Office for approval.

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| U _{RDC} Rated Voltage Code | C _R Rated Capacitance | ESR _{max} Equivalent Series Resistance | tanδ Dissipation Factor | I _{leak} Leakage Current | I _{max,105°C} Max. Allowed Ripple Current | I _{max,125°C} Max. Allowed Ripple Current | T ₀ Operating Temperature | Size øD x L | L _e Endurance Life Time | L _o Operational Life Time | Series | Ordercode | |
|--|-------------------------------------|--|----------------------------|--------------------------------------|---|---|---|----------------|--|---|-----------|--|-----------------------|
| (V) | (µF) | (mΩ) | 20°C 120Hz | (µA) | ≤105°C 100kHz | 105°C <T<125°C 100kHz | (°C) | (mm) | U _R , T ₀ (h) | U _R , T ₀ , I _{max} (h) | | ◇◇ = pin style & length Details: Page 168 | |
| 6,3 0J | 1 000 | 7 | 0,08 | 1260 | 6100 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCROJEN102MCAC◇◇50SE3 | |
| | 1 500 | 7 | 0,08 | 1890 | 5700 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HEN EN | PCROJEN152MBAB◇◇35SE3 | |
| | | 10 | 0,10 | 1890 | 5560 | - | 105 | 10 x 12,5 | 5 000 | 500 | PC HCS CS | PCROJCS152MCAC◇◇50SE3 | |
| 10 1A | 47 | 25 | 0,08 | 95 | 2900 | - | 105 | 6,3 x 10 | 2 000 | 200 | PC HCN CN | PCR1ACN470MF10◇◇25SE3 | |
| | 68 | 25 | 0,08 | 136 | 2900 | - | 105 | 6,3 x 10 | 2 000 | 200 | PC HCN CN | PCR1ACN680MF10◇◇25SE3 | |
| | 100 | 24 | 0,10 | 200 | 2490 | - | 105 | 5 x 8 | 2 000 | 200 | PC HEL EL | PCR1AEL101ME08◇◇20SE3 | |
| | | 25 | 0,08 | 200 | 2900 | - | 105 | 6,3 x 10 | 2 000 | 200 | PC HCN CN | PCR1ACN101MF10◇◇25SE3 | |
| | 120 | 24 | 0,10 | 240 | 2490 | - | 105 | 5 x 8 | 2 000 | 200 | PC HEL EL | PCR1AEL121ME08◇◇20SE3 | |
| | | 35 | 0,12 | 600 | 2560 | 810* | 125 | 8 x 6 | 1 000 | 100 | PC HGN GN | PCR1AGN121MB06◇◇35SE3 | |
| | 150 | 25 | 0,12 | 300 | 2900 | - | 105 | 6,3 x 10 | 2 000 | 200 | PC HCN CN | PCR1ACN151MF10◇◇25SE3 | |
| | | 10 | 0,10 | 500 | 4680 | - | 105 | 6,3 x 8 | 2 000 | 200 | PC HEL EL | PCR1AEL221MF08◇◇25SE3 | |
| | 220 | 17 | 0,12 | 440 | 3950 | 1260* | 125 | 8 x 11,5 | 1 000 | 100 | PC HGN GN | PCR1AGN221MBAB◇◇35SE3 | |
| | | 10 | 0,12 | 330 | 5500 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HCN CN | PCR1ACN221MCAC◇◇50SE3 | |
| | | 10 | 0,10 | 540 | 4680 | - | 105 | 6,3 x 8 | 2 000 | 200 | PC HEL EL | PCR1AEL271MF08◇◇25SE3 | |
| | 270 | 8 | 0,08 | 540 | 5650 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HEN EN | PCR1AEN271MBAB◇◇35SE3 | |
| | | 25 | 0,12 | 540 | 3700 | 1170* | 125 | 10 x 7 | 1 000 | 100 | PC HGN GN | PCR1AGN271MC07◇◇50SE3 | |
| | 330 | 15 | 0,10 | 660 | 3600 | - | 105 | 6,3 x 9 | 2 000 | 200 | PC HEL EL | PCR1AEL331MF09◇◇25SE3 | |
| | | 10 | 0,10 | 660 | 5000 | - | 105 | 8 x 8 | 5 000 | 500 | PC HCS CS | PCR1ACS331MB08◇◇35SE3 | |
| | | 17 | 0,12 | 660 | 3950 | 1260* | 125 | 8 x 11,5 | 1 000 | 100 | PC HGN GN | PCR1AGN331MBAB◇◇35SE3 | |
| | 390 | 10 | 0,08 | 780 | 5000 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN HN | PCR1AHN391MB08◇◇35SE3 | |
| | | 8 | 0,08 | 780 | 5650 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HEN EN | PCR1AEN391MBAB◇◇35SE3 | |
| | 470 | 12 | 0,10 | 940 | 4100 | - | 105 | 6,3 x 9 | 2 000 | 200 | PC HEL EL | PCR1AEL471MF09◇◇25SE3 | |
| | | 8 | 0,08 | 940 | 5700 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN HN | PCR1AHN471MB08◇◇35SE3 | |
| | | 11 | 0,10 | 940 | 5100 | - | 105 | 8 x 11,5 | 5 000 | 500 | PC HCS CS | PCR1ACS471MBAB◇◇35SE3 | |
| | | 7 | 0,08 | 940 | 6100 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCR1AEN471MCAC◇◇50SE3 | |
| | 560 | 12 | 0,10 | 1120 | 4100 | - | 105 | 6,3 x 11 | 2 000 | 200 | PC HEL EL | PCR1AEL561MF11◇◇25SE3 | |
| | | 8 | 0,08 | 1120 | 5700 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN HN | PCR1AHN561MB08◇◇35SE3 | |
| | | 11 | 1,10 | 1120 | 5100 | - | 105 | 8 x 11,5 | 5 000 | 500 | PC HCS CS | PCR1ACS561MBAB◇◇35SE3 | |
| | | 7 | 0,08 | 1120 | 6100 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCR1AEN561MCAC◇◇50SE3 | |
| | 680 | 13 | 0,12 | 840 | 5250 | 1680* | 125 | 10 x 12,5 | 1 000 | 100 | PC HGN GN | PCR1AGN561MCAC◇◇50SE3 | |
| | | 15 | 0,10 | 1360 | 3600 | - | 105 | 6,3 x 11 | 2 000 | 200 | PC HEL EL | PCR1AEL681MF11◇◇25SE3 | |
| | | 8 | 0,10 | 1360 | 5650 | - | 105 | 8 x 11,5 | 5 000 | 500 | PC HCS CS | PCR1ACS681MBAB◇◇35SE3 | |
| | 1 000 | 7 | 0,08 | 1360 | 6100 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCR1AEN681MCAC◇◇50SE3 | |
| | | 8 | 0,08 | 2000 | 6100 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCR1AEN102MCAC◇◇50SE3 | |
| | 16 1C | 82 | 40 | 0,12 | 656 | 2120 | 670* | 125 | 8 x 6 | 1 000 | 100 | PC HGN GN | PCR1CGN820MB06◇◇35SE3 |
| | | 100 | 38 | 0,12 | 320 | 1900 | - | 105 | 5 x 5 | 3 000 | 300 | PC HPF PF | PCR1CPF101ME05◇◇20SE3 |
| | | | 10 | 0,10 | 500 | 4680 | - | 105 | 6,3 x 8 | 5 000 | 500 | PC HCS CS | PCR1CCS101MF08◇◇25SE3 |
| | | 150 | 25 | 0,12 | 480 | 2800 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1CPF151MF05◇◇25SE3 |
| | | | 15 | 0,08 | 480 | 3820 | - | 105 | 6,3 x 8 | 2 000 | 200 | PC HPN HN | PCR1CHN151MF08◇◇25SE3 |
| | | | 15 | 0,08 | 480 | 4080 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN HN | PCR1CHN151MB08◇◇35SE3 |
| | | | 16 | 0,12 | 480 | 4360 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HCN CN | PCR1CCN151MBAB◇◇35SE3 |
| | | | 30 | 0,12 | 480 | 3020 | 955* | 125 | 10 x 7 | 1 000 | 100 | PC HGN GN | PCR1CGN151MC07◇◇50SE3 |
| | | | 10 | 0,12 | 360 | 5500 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HCN CN | PCR1CCN151MCAC◇◇50SE3 |
| | | 180 | 25 | 0,12 | 576 | 2800 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1CPF181MF05◇◇25SE3 |
| | | | 10 | 0,10 | 576 | 5000 | - | 105 | 8 x 8 | 5 000 | 500 | PC HCS CS | PCR1CCS181MB08◇◇35SE3 |
| | | | 11 | 0,08 | 580 | 5100 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HEN EN | PCR1CEN181MBAB◇◇35SE3 |
| | | 220 | 20 | 0,12 | 580 | 3640 | 1151* | 125 | 8 x 11,5 | 1 000 | 100 | PC HGN GN | PCR1CGN181MBAB◇◇35SE3 |
| | | | 15 | 0,12 | 705 | 3000 | - | 105 | 5 x 11 | 2 000 | 200 | PC HEL EL | PCR1CEL221ME11◇◇20SE3 |
| | | 270 | 10 | 0,08 | 705 | 5000 | - | 105 | 8 x 8 | 2 000 | 200 | PC HPN HN | PCR1CHN221MB08◇◇35SE3 |
| | | | 15 | 0,12 | 865 | 3000 | - | 105 | 5 x 11 | 2 000 | 200 | PC HEL EL | PCR1CEL271ME11◇◇20SE3 |
| | | | 22 | 0,12 | 864 | 3300 | - | 105 | 6,3 x 8 | 3 000 | 300 | PC HPF PF | PCR1CPF271MF08◇◇25SE3 |
| 26 | | | 0,12 | 864 | 1650 | 521* | 125 | 6,3 x 8 | 2 000 | 200 | PC HPK PK | PCR1CPK271MF08◇◇25SE3 | |
| 26 | | | 0,12 | 864 | 1650 | 521* | 125 | 8 x 6 | 2 000 | 200 | PC HPK PK | PCR1CPK271MB06◇◇35SE3 | |
| 10 | | | 0,10 | 865 | 5000 | - | 105 | 8 x 8 | 5 000 | 500 | PC HCS CS | PCR1CCS271MB08◇◇35SE3 | |
| 330 | | 10 | 0,08 | 865 | 5100 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HEN EN | PCR1CEN271MBAB◇◇35SE3 | |
| | | 22 | 0,12 | 1056 | 3300 | - | 105 | 6,3 x 8 | 3 000 | 300 | PC HPF PF | PCR1CPF331MF08◇◇25SE3 | |
| | | 10 | 0,08 | 1060 | 5100 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HEN EN | PCR1CEN331MBAB◇◇35SE3 | |
| | | 10 | 0,08 | 1060 | 6100 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCR1CEN331MCAC◇◇50SE3 | |
| 390 | | 16 | 0,12 | 795 | 4750 | 1520* | 125 | 10 x 12,5 | 1 000 | 100 | PC HGN GN | PCR1CGN331MCAC◇◇50SE3 | |
| | | 15 | 0,12 | 1250 | 3600 | - | 105 | 6,3 x 12,0 | 2 000 | 200 | PC HEL EL | PCR1CEL391MF12◇◇25SE3 | |
| 470 | | 19 | 0,12 | 1248 | 2200 | 695* | 125 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1CPK391MB08◇◇35SE3 | |
| | | 15 | 0,15 | 1505 | 3600 | - | 105 | 6,3 x 12,0 | 2 000 | 200 | PC HEL EL | PCR1CEL471MF12◇◇25SE3 | |
| | | 16 | 0,12 | 1504 | 4400 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1CPF471MB08◇◇35SE3 | |
| | | 14 | 0,12 | 1504 | 4950 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1CPF471MBAB◇◇35SE3 | |
| | | 10 | 0,10 | 1505 | 6100 | - | 105 | 10 x 12,5 | 5 000 | 500 | PC HCS CS | PCR1CCS471MCAC◇◇50SE3 | |

*Under certain conditions the currents can reach the value of 105°C. Please ask your Jianghai Europe Sales Office for approval.

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| U _{RDC} Rated Voltage Code (V) | C _R Rated Capacitance 20°C 120Hz (µF) | ESR _{max} Equivalent Series Resistance 30°C 100kHz (mΩ) | tanδ Dissipation Factor 20°C 120Hz | I _{leak} Leakage Current (µA) | I _{max, 105°C} Max. Allowed Ripple Current <105°C 100kHz (mArms) | I _{max, 125°C} Max. Allowed Ripple Current 105°C <T<125°C 100kHz (mArms) | T ₀ Operating Temperature (°C) | Size øD x L (mm) | L _e Endurance Life Time U ₀ , T ₀ (h) | L _o Operational Life Time U ₀ , T ₀ , I _{max} (h) | Series | Ordercode ◇◇ = pin style & length Details: Page 168 |
|---|--|--|---|--|---|---|---|------------------------|---|--|-----------------------|---|
| | | | | | | | | | | | | |
| 16 1C | 560 | 16 | 0,12 | 1792 | 4400 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1CPF561MB08◇◇35SE3 |
| | | 16 | 0,12 | 1792 | 2500 | 790* | 125 | 8 x 11,5 | 2 000 | 200 | PC HPG PK | PCR1CPK561MBAB◇◇35SE3 |
| | | 10 | 0,12 | 1795 | 6100 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCR1CEN561MCAC◇◇50SE3 |
| | 680 | 14 | 0,12 | 2176 | 4950 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1CPF681MBAB◇◇35SE3 |
| | | 10 | 0,12 | 2180 | 6100 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCR1CEN681MCAC◇◇50SE3 |
| | 820 | 14 | 0,12 | 2624 | 4950 | - | 105 | 8 x 14 | 2 000 | 200 | PC HEG EG | PCR1CEG821MB14◇◇35SE3 |
| | | 10 | 0,12 | 2625 | 6100 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCR1CEN821MCAC◇◇50SE3 |
| | | 14 | 0,12 | 3200 | 4950 | - | 105 | 8 x 14 | 2 000 | 200 | PC HEG EG | PCR1CEG102MB14◇◇35SE3 |
| | 1 000 | 12 | 0,12 | 3200 | 5400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1CPF102MCAC◇◇50SE3 |
| | | 10 | 0,12 | 3200 | 6100 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HEN EN | PCR1CEN102MCAC◇◇50SE3 |
| | | 14 | 0,12 | 3200 | 2700 | 853* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPG PK | PCR1CPK102MCAC◇◇50E3 |
| | 1 200 | 12 | 0,12 | 3840 | 5400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1CPF122MCAC◇◇50SE3 |
| | | 12 | 0,12 | 3840 | 6100 | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1CEG122MC14◇◇50SE3 |
| | 1 500 | 10 | 0,12 | 4800 | 6100 | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1CEG152MC14◇◇50SE3 |
| | 1 800 | 10 | 0,12 | 5760 | 7000 | - | 105 | 10 x 16 | 2 000 | 200 | PC HEG EG | PCR1CEG182MC16◇◇50SE3 |
| | 2 200 | 10 | 0,12 | 7040 | 7000 | - | 105 | 10 x 16 | 2 000 | 200 | PC HEG EG | PCR1CEG222MC16◇◇50SE3 |
| 20 1D | 33 | 48 | 0,12 | 135 | 2200 | - | 105 | 6,3 x 10 | 2 000 | 200 | PC HCN CN | PCR1DCN330MF10◇◇25SE3 |
| | 47 | 45 | 0,12 | 470 | 1890 | 598* | 125 | 8 x 6 | 1 000 | 100 | PC HGN GN | PCR1DGN470MB06◇◇35SE3 |
| | | 30 | 0,12 | 190 | 2800 | - | 105 | 8 x 8 | 2 000 | 200 | PC HCN CN | PCR1DCN470MB08◇◇35SE3 |
| | 68 | 40 | 0,12 | 272 | 1900 | - | 105 | 5 x 5 | 3 000 | 300 | PC HPF PF | PCR1DPF680ME05◇◇20SE3 |
| | | 40 | 0,12 | 275 | 2400 | 759* | 125 | 10 x 7 | 1 000 | 100 | PC HGN GN | PCR1DGN680MC07◇◇50SE3 |
| | 82 | 40 | 0,12 | 328 | 1900 | - | 105 | 5 x 5 | 3 000 | 300 | PC HPF PF | PCR1DPF820ME05◇◇20SE3 |
| | 100 | 24 | 0,12 | 400 | 3320 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HCN CN | PCR1DCN101MBAB◇◇35SE3 |
| | | 24 | 0,12 | 400 | 3320 | 1050* | 125 | 8 x 11,5 | 1 000 | 100 | PC HGN GN | PCR1DGN101MBAB◇◇35SE3 |
| | | 20 | 0,12 | 400 | 4320 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HCN CN | PCR1DCN101MCAC◇◇50SE3 |
| | 120 | 28 | 0,12 | 480 | 2650 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1DPF121MF05◇◇25SE3 |
| | | 34 | 0,12 | 480 | 1300 | 411* | 125 | 6,3 x 5 | 2 000 | 200 | PC HPG PK | PCR1DPK121MF05◇◇25E3 |
| | 150 | 28 | 0,12 | 600 | 2650 | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1DPF151MB06◇◇35SE3 |
| | | 20 | 0,12 | 600 | 4320 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HCN CN | PCR1DCN151MCAC◇◇50SE3 |
| | | 20 | 0,12 | 600 | 4350 | 1390* | 125 | 10 x 12,5 | 1 000 | 100 | PC HGN GN | PCR1DGN151MCAC◇◇50SE3 |
| | 180 | 29 | 0,12 | 720 | 1600 | 506* | 125 | 6,3 x 8 | 2 000 | 200 | PC HPG PK | PCR1DPK181MF08◇◇25E3 |
| | 220 | 24 | 0,12 | 880 | 3200 | - | 105 | 6,3 x 8 | 3 000 | 300 | PC HPF PF | PCR1DPF221MF08◇◇25SE3 |
| | | 29 | 0,12 | 880 | 1600 | 506* | 125 | 6,3 x 8 | 2 000 | 200 | PC HPG PK | PCR1DPK221MF08◇◇25E3 |
| | 270 | 24 | 0,12 | 1080 | 3200 | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1DPF271MB06◇◇35SE3 |
| | 330 | 17 | 0,12 | 1320 | 4300 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1DPF331MB08◇◇35SE3 |
| | | 21 | 0,12 | 1320 | 2100 | 664* | 125 | 8 x 8 | 2 000 | 200 | PC HPG PK | PCR1DPK331MB08◇◇35E3 |
| | 390 | 17 | 0,12 | 1560 | 4300 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1DPF391MB08◇◇35SE3 |
| | | 14 | 0,12 | 1560 | 4950 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1DPF391MBAB◇◇35SE3 |
| | | 17 | 0,12 | 1560 | 2400 | 759* | 125 | 8 x 11,5 | 2 000 | 200 | PC HPG PK | PCR1DPK391MBAB◇◇35E3 |
| | 470 | 14 | 0,12 | 1880 | 4950 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1DPF471MBAB◇◇35SE3 |
| | 560 | 14 | 0,12 | 2240 | 4950 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1DPF561MBAB◇◇35SE3 |
| | | 12 | 0,12 | 2240 | 5400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1DPF561MCAC◇◇50SE3 |
| | 680 | 18 | 0,12 | 2720 | 4350 | - | 105 | 8 x 14 | 2 000 | 200 | PC HEG EG | PCR1DEG681MB14◇◇35SE3 |
| | | 12 | 0,12 | 2720 | 5400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1DPF681MCAC◇◇50SE3 |
| | | 15 | 0,12 | 2720 | 2600 | 822* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPG PK | PCR1DPK681MCAC◇◇50E3 |
| | 820 | 12 | 0,12 | 3280 | 5400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1DPF821MCAC◇◇50SE3 |
| | 1 000 | 14 | 0,12 | 4000 | 5100 | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1DEG102MC14◇◇50SE3 |
| | 1 200 | 14 | 0,12 | 4800 | 5000 | - | 105 | 10 x 16 | 2 000 | 200 | PC HEG EG | PCR1DEG122MC16◇◇50SE3 |
| 25 1E | 10 | 50 | 0,12 | 50 | 2000 | - | 105 | 6,3 x 8 | 2 000 | 200 | PC HCN CN | PCR1ECN100MF08◇◇25SE3 |
| | 15 | 48 | 0,12 | 75 | 2200 | - | 105 | 6,3 x 10 | 2 000 | 200 | PC HCN CN | PCR1ECN150MF10◇◇25SE3 |
| | 22 | 30 | 0,12 | 110 | 2800 | - | 105 | 8 x 8 | 2 000 | 200 | PC HCN CN | PCR1ECN220MB08◇◇35SE3 |
| | 33 | 24 | 0,12 | 165 | 3600 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HCN CN | PCR1ECN330MBAB◇◇35SE3 |
| | 47 | 24 | 0,12 | 235 | 3320 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HCN CN | PCR1ECN470MBAB◇◇35SE3 |
| | 56 | 50 | 0,12 | 280 | 1700 | - | 105 | 5 x 5 | 3 000 | 300 | PC HPF PF | PCR1EPF560ME05◇◇20SE3 |
| | | 24 | 0,12 | 280 | 3320 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HCN CN | PCR1ECN560MBAB◇◇35SE3 |
| | 68 | 50 | 0,12 | 340 | 1700 | - | 105 | 5 x 5 | 3 000 | 300 | PC HPF PF | PCR1EPF680ME05◇◇20SE3 |
| | | 24 | 0,12 | 340 | 3320 | 1050* | 125 | 8 x 11,5 | 1 000 | 100 | PC HGN GN | PCR1EGN680MBAB◇◇35SE3 |
| | | 20 | 0,12 | 340 | 3800 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HCN CN | PCR1ECN680MCAC◇◇50SE3 |
| | 82 | 36 | 0,12 | 410 | 1255 | 396* | 125 | 6,3 x 5 | 2 000 | 200 | PC HPG PK | PCR1EPK820MF05◇◇25E3 |
| | 100 | 30 | 0,12 | 500 | 2550 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1EPF101MF05◇◇25SE3 |
| | | 36 | 0,12 | 500 | 1255 | 396* | 125 | 6,3 x 5 | 2 000 | 200 | PC HPG PK | PCR1EPK101MF05◇◇25E3 |
| | | 20 | 0,12 | 500 | 4320 | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HCN CN | PCR1ECN101MCAC◇◇50SE3 |
| | | 20 | 0,12 | 500 | 4350 | 1390* | 125 | 10 x 12,5 | 1 000 | 100 | PC HGN GN | PCR1EGN101MCAC◇◇50SE3 |
| | 120 | 14 | 0,12 | 500 | 5100 | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1EEG102MC14◇◇50SE3 |
| 30 | | 0,12 | 600 | 2550 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1EPF121MF05◇◇25SE3 | |

*Under certain conditions the currents can reach the value of 105°C. Please ask your Jianghai Europe Sales Office for approval.

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| U _{RDC} Rated Voltage Code | C _R Rated Capacitance | ESR _{max} Equivalent Series Resistance | tanδ Dissipation Factor | I _{leak} Leakage Current | I _{max,105°C} Max. Allowed Ripple Current | I _{max,125°C} Max. Allowed Ripple Current | T ₀ Operating Temperature | Size øD x L | L _c Endurance Life Time | L _o Operational Life Time | Series | Ordercode | |
|--|-------------------------------------|--|----------------------------|--------------------------------------|---|---|---|----------------|---------------------------------------|--|-----------|--------------------------|-----------------------|
| (V) | (µF) | (mΩ) | (%) | (µA) | (mA) | (mA) | (°C) | (mm) | (h) | (h) | | | |
| | 20°C 120Hz | 20°C 100kHz | 20°C 120Hz | | ≤105°C 100kHz | 105°C <T<125°C 100kHz | | | U _R , T ₀ | U _R , T ₀ , I _{max} | | ◇◇ = pin style & length | |
| | | | | | | | | | | | | Details: Page 168 | |
| 25 1E | 150 | 29 | 0,12 | 750 | 1600 | 506* | 125 | 6,3 x 8 | 2 000 | 200 | PC HPK PK | PCR1EPK151MF08◇◇25E3 | |
| | | 29 | 0,12 | 750 | 1600 | 506* | 125 | 8 x 6 | 2 000 | 200 | PC HPK PK | PCR1EPK151MB06◇◇35E3 | |
| | 180 | 24 | 0,12 | 900 | 3200 | - | - | 105 | 6,3 x 8 | 3 000 | 300 | PC HPF PF | PCR1EPF181MF08◇◇25SE3 |
| | | 29 | 0,12 | 900 | 1600 | 506* | 125 | 6,3 x 8 | 2 000 | 200 | PC HPK PK | PCR1EPK181MF08◇◇25E3 | |
| | | 24 | 0,12 | 900 | 3200 | - | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1EPF181MB06◇◇35SE3 |
| | 220 | 29 | 0,12 | 900 | 1600 | 506* | 125 | 8 x 6 | 2 000 | 200 | PC HPK PK | PCR1EPK181MB06◇◇35E3 | |
| | | 24 | 0,12 | 1100 | 3200 | - | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1EPF221MB06◇◇35SE3 |
| | 270 | 22 | 0,12 | 1100 | 2050 | 648* | 125 | 105 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1EPK221MB08◇◇35E3 |
| | | 18 | 0,12 | 1350 | 4100 | - | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1EPF271MB08◇◇35SE3 |
| | 330 | 22 | 0,12 | 1350 | 2050 | 648* | 125 | 105 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1EPK271MB08◇◇35E3 |
| | | 18 | 0,12 | 1650 | 4100 | - | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1EPF331MB08◇◇35SE3 |
| | | 16 | 0,12 | 1650 | 4650 | - | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1EPF331MBAB◇◇35SE3 |
| | 390 | 19 | 0,12 | 1650 | 2325 | 735* | 125 | 105 | 8 x 11,5 | 2 000 | 200 | PC HPK PK | PCR1EPK331MBAB◇◇35E3 |
| | | 16 | 0,12 | 1950 | 4650 | - | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1EPF391MBAB◇◇35SE3 |
| | | 19 | 0,12 | 1950 | 2325 | 735* | 125 | 105 | 8 x 11,5 | 2 000 | 200 | PC HPK PK | PCR1EPK391MBAB◇◇35E3 |
| | 470 | 16 | 0,12 | 2350 | 4650 | - | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1EPF471MBAB◇◇35SE3 |
| | | 14 | 0,12 | 2350 | 5000 | - | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1EPF471MCAC◇◇50SE3 |
| | | 17 | 0,12 | 2350 | 2500 | 790* | 125 | 105 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1EPK471MCAC◇◇50E3 |
| | 560 | 16 | 0,12 | 2800 | 4600 | - | - | 105 | 8 x 14 | 2 000 | 200 | PC HEG EG | PCR1EEG561MB14◇◇35SE3 |
| | | 14 | 0,12 | 2800 | 5000 | - | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1EPF561MCAC◇◇50SE3 |
| 17 | | 0,12 | 2800 | 2500 | 790* | 125 | 105 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1EPK561MCAC◇◇50E3 | |
| 680 | 16 | 0,12 | 3400 | 4650 | - | - | 105 | 8 x 16 | 2 000 | 200 | PC HEG EG | PCR1EEG681MB16◇◇35SE3 | |
| | 14 | 0,12 | 3400 | 5000 | - | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1EPF681MCAC◇◇50SE3 | |
| 820 | 14 | 0,12 | 4100 | 5100 | - | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1EEG821MC14◇◇50SE3 | |
| 1 200 | 14 | 0,12 | 6000 | 5910 | - | - | 105 | 10 x 16 | 2 000 | 200 | PC HEG EG | PCR1EEG122MC16◇◇50SE3 | |
| 28 1L | 47 | 50 | 0,12 | 264 | 1700 | - | 105 | 5 x 5 | 3 000 | 300 | PC HPF PF | PCR1LPF470ME05◇◇20SE3 | |
| | 82 | 33 | 0,12 | 460 | 2450 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1LPF820MF05◇◇25SE3 | |
| | 150 | 28 | 0,12 | 840 | 2950 | - | - | 105 | 6,3 x 8 | 3 000 | 300 | PC HPF PF | PCR1LPF151MF08◇◇25SE3 |
| | | 28 | 0,12 | 840 | 2950 | - | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1LPF151MB06◇◇35SE3 |
| | 180 | 22 | 0,12 | 1008 | 3700 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1LPF181MB08◇◇35SE3 | |
| | 220 | 22 | 0,12 | 1252 | 3700 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1LPF221MB08◇◇35SE3 | |
| | 270 | 18 | 0,12 | 1512 | 4350 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1LPF271MBAB◇◇35SE3 | |
| | 330 | 18 | 0,12 | 1848 | 4350 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1LPF331MBAB◇◇35SE3 | |
| | 470 | 16 | 0,12 | 2632 | 4650 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1LPF471MCAC◇◇50SE3 | |
| | 560 | 16 | 0,12 | 3136 | 4650 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1LPF561MCAC◇◇50SE3 | |
| 32 1F | 39 | 55 | 0,12 | 250 | 1600 | - | 105 | 5 x 5 | 3 000 | 300 | PC HPF PF | PCR1FPF390ME05◇◇20SE3 | |
| | 68 | 35 | 0,12 | 436 | 2350 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1FPF680MF05◇◇25SE3 | |
| | | 30 | 0,12 | 768 | 2800 | - | - | 105 | 6,3 x 8 | 3 000 | 300 | PC HPF PF | PCR1FPF121MF08◇◇25SE3 |
| | 120 | 30 | 0,12 | 768 | 2800 | - | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1FPF121MB06◇◇35SE3 |
| | | 24 | 0,12 | 1152 | 3600 | - | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1FPF181MB08◇◇35SE3 |
| | 220 | 20 | 0,12 | 1408 | 4000 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1FPF221MBAB◇◇35SE3 | |
| | 270 | 20 | 0,12 | 1728 | 4000 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1FPF271MBAB◇◇35SE3 | |
| | 330 | 20 | 0,12 | 2112 | 4000 | - | 105 | 8 x 14 | 2 000 | 200 | PC HEG EG | PCR1FEG331MB14◇◇35SE3 | |
| | 390 | 18 | 0,12 | 2496 | 4350 | - | - | 105 | 8 x 14 | 2 000 | 200 | PC HEG EG | PCR1FEG391MB14◇◇35SE3 |
| | | 18 | 0,12 | 2496 | 4400 | - | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1FPF391MCAC◇◇50SE3 |
| | 470 | 18 | 0,12 | 3008 | 4400 | - | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1FPF471MCAC◇◇50SE3 |
| | | 18 | 0,12 | 3008 | 4500 | - | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1FEG471MC14◇◇50SE3 |
| | 560 | 18 | 0,12 | 3584 | 4500 | - | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1FEG561MC14◇◇50SE3 |
| 680 | 18 | 0,12 | 4352 | 4690 | - | - | 105 | 10 x 16 | 2 000 | 200 | PC HEG EG | PCR1FEG681MC16◇◇50SE3 | |
| 35 1V | 10 | 50 | 0,12 | 175 | 2300 | - | 105 | 8 x 8 | 2 000 | 200 | PC HCN CN | PCR1VCN100MB08◇◇35SE3 | |
| | 18 | 34 | 0,12 | 315 | 2830 | - | 105 | 8 x 11,5 | 2 000 | 200 | PC HCN CN | PCR1VCN180MBAB◇◇35SE3 | |
| | 33 | 55 | 0,12 | 231 | 1600 | - | - | 105 | 5 x 5 | 3 000 | 300 | PC HPF PF | PCR1VPF330ME05◇◇20SE3 |
| | | 30 | 0,12 | 580 | 3270 | - | - | 105 | 10 x 12,5 | 2 000 | 200 | PC HCN CN | PCR1VCN330MCAC◇◇50SE3 |
| | 47 | 35 | 0,12 | 329 | 2350 | - | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1VPF470MF05◇◇25SE3 |
| | | 42 | 0,12 | 329 | 1175 | 371* | 125 | 105 | 6,3 x 5 | 2 000 | 200 | PC HPK PK | PCR1VPK470MF05◇◇25E3 |
| | 56 | 35 | 0,12 | 392 | 2350 | - | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1VPF560MF05◇◇25SE3 |
| | | 42 | 0,12 | 392 | 1175 | 371* | 125 | 105 | 6,3 x 5 | 2 000 | 200 | PC HPK PK | PCR1VPK560MF05◇◇25E3 |
| | 82 | 36 | 0,12 | 574 | 1400 | 442* | 125 | 105 | 6,3 x 8 | 2 000 | 200 | PC HPK PK | PCR1VPK820MF08◇◇25E3 |
| | | 36 | 0,12 | 574 | 1400 | 442* | 125 | 105 | 8 x 6 | 2 000 | 200 | PC HPK PK | PCR1VPK820MB06◇◇35E3 |
| | 100 | 30 | 0,12 | 700 | 2800 | - | - | 105 | 6,3 x 8 | 3 000 | 300 | PC HPF PF | PCR1VPF101MF08◇◇25SE3 |
| | | 36 | 0,12 | 700 | 1400 | 442* | 125 | 105 | 6,3 x 8 | 2 000 | 200 | PC HPK PK | PCR1VPK101MF08◇◇25E3 |
| | | 30 | 0,12 | 700 | 2800 | - | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1VPF101MB06◇◇35SE3 |
| | | 36 | 0,12 | 700 | 1400 | 442* | 125 | 105 | 8 x 6 | 2 000 | 200 | PC HPK PK | PCR1VPK101MB06◇◇35E3 |
| 120 | 29 | 0,12 | 840 | 1800 | 569* | 125 | 105 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1VPK121MB08◇◇35E3 | |

*Under certain conditions the currents can reach the value of 105°C. Please ask your Jianghai Europe Sales Office for approval.

| U _{RDC} Rated Voltage Code (V) | C _R Rated Capacitance 20°C 120Hz (µF) | ESR _{max} Equivalent Series Resistance 20°C 100kHz (mΩ) | tanδ Dissipation Factor 20°C 120Hz | I _{leak} Leakage Current (µA) | I _{max, 105°C} Max. Allowed Ripple Current <105°C 100kHz (mA Arms) | I _{max, 125°C} Max. Allowed Ripple Current 105°C <T<125°C 100kHz (mA Arms) | T ₀ Operating Temperature (°C) | Size øD x L (mm) | L _e Endurance Life Time U ₀ , T ₀ (h) | L _o Operational Life Time U ₀ , T ₀ , I _{max} (h) | Series | Ordercode ◇◇ = pin style & length Details: Page 168 |
|---|--|--|---|--|---|---|---|------------------------|---|--|-----------------------|---|
| | | | | | | | | | | | | |
| 35 1V | 150 | 24 | 0,12 | 1050 | 3600 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1VPF151MB08◇◇35SE3 |
| | | 29 | 0,12 | 1050 | 1800 | 569* | 125 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1VPK151MB08◇◇35E3 |
| | 180 | 24 | 0,12 | 3600 | 3600 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1VPF181MBAB◇◇35SE3 |
| | | 24 | 0,12 | 1260 | 2000 | 632* | 125 | 8 x 11,5 | 2 000 | 200 | PC HPK PK | PCR1VPK181MBAB◇◇35E3 |
| | 220 | 20 | 0,12 | 1540 | 4000 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1VPF221MBAB◇◇35-E3 |
| | | 20 | 0,12 | 1540 | 4000 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1VPF221MBAB◇◇35SE3 |
| | 270 | 24 | 0,12 | 1540 | 2000 | 632* | 125 | 8 x 11,5 | 2 000 | 200 | PC HPK PK | PCR1VPK221MBAB◇◇35E3 |
| | | 20 | 0,12 | 1890 | 4000 | - | 105 | 8 x 14 | 2 000 | 200 | PC HEG EG | PCR1VEG271MB14◇◇35SE3 |
| | 270 | 22 | 0,12 | 1890 | 2200 | 695* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1VPK271MCAC◇◇50E3 |
| | | 20 | 0,12 | 2310 | 4100 | - | 105 | 8 x 16 | 2 000 | 200 | PC HEG EG | PCR1VEG331MB16◇◇35SE3 |
| | 330 | 18 | 0,12 | 2310 | 4400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1VPF331MCAC◇◇50SE3 |
| | | 22 | 0,12 | 2310 | 2200 | 695* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1VPK331MCAC◇◇50E3 |
| | 390 | 18 | 0,12 | 2730 | 4400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1VPF391MCAC◇◇50SE3 |
| | 470 | 18 | 0,12 | 3290 | 4500 | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1VEG471MC14◇◇50SE3 |
| 560 | 18 | 0,12 | 3920 | 4690 | - | 105 | 10 x 16 | 2 000 | 200 | PC HEG EG | PCR1VEG561MC16◇◇50SE3 | |
| 680 | 18 | 0,12 | 4760 | 4690 | - | 105 | 10 x 16 | 2 000 | 200 | PC HEG EG | PCR1VEG681MC16◇◇50SE3 | |
| 40 16 | 22 | 60 | 0,12 | 176 | 1550 | - | 105 | 5 x 5 | 3 000 | 300 | PC HPF PF | PCR1GPF220ME05◇◇20SE3 |
| | 33 | 40 | 0,12 | 264 | 2200 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1GPF330MF05◇◇25SE3 |
| | | 45 | 0,12 | 264 | 1150 | 363* | 125 | 6,3 x 5 | 2 000 | 200 | PC HPK PK | PCR1GPK330MF05◇◇25E3 |
| | 39 | 37 | 0,12 | 312 | 2300 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1GPF390MF05◇◇25SE3 |
| | | 45 | 0,12 | 312 | 1150 | 363* | 125 | 6,3 x 5 | 2 000 | 200 | PC HPK PK | PCR1GPK390MF05◇◇25E3 |
| | 68 | 38 | 0,12 | 544 | 1350 | 426* | 125 | 6,3 x 8 | 2 000 | 200 | PC HPK PK | PCR1GPK680MF08◇◇25E3 |
| | | 38 | 0,12 | 544 | 1350 | 426* | 125 | 8 x 6 | 2 000 | 200 | PC HPK PK | PCR1GPK680MB06◇◇35E3 |
| | 82 | 32 | 0,12 | 656 | 2700 | - | 105 | 6,3 x 8 | 3 000 | 300 | PC HPF PF | PCR1GPF820MF08◇◇25SE3 |
| | | 38 | 0,12 | 656 | 1350 | 426* | 125 | 6,3 x 8 | 2 000 | 200 | PC HPK PK | PCR1GPK820MF08◇◇25E3 |
| | | 32 | 0,12 | 656 | 2700 | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1GPF820MB06◇◇35SE3 |
| | 100 | 38 | 0,12 | 656 | 1350 | 426* | 125 | 8 x 6 | 2 000 | 200 | PC HPK PK | PCR1GPK820MB06◇◇35E3 |
| | | 31 | 0,12 | 800 | 1750 | 553* | 125 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1GPK101MB08◇◇35E3 |
| | 120 | 26 | 0,12 | 960 | 3500 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1GPF121MB08◇◇35SE3 |
| | | 31 | 0,12 | 960 | 1750 | 553* | 125 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1GPK121MB08◇◇35E3 |
| | 150 | 21 | 0,12 | 1200 | 3500 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1GPF151MBAB◇◇35SE3 |
| | | 25 | 0,12 | 1200 | 1950 | 616* | 125 | 8 x 11,5 | 2 000 | 200 | PC HPK PK | PCR1GPK151MBAB◇◇35E3 |
| | 220 | 18 | 0,12 | 1760 | 4400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1GPF221MCAC◇◇50SE3 |
| | | 22 | 0,12 | 1760 | 2200 | 695* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1GPK221MCAC◇◇50E3 |
| | 270 | 20 | 0,12 | 2160 | 4000 | - | 105 | 8 x 14 | 2 000 | 200 | PC HEG EG | PCR1GEG271MB14◇◇35SE3 |
| | | 18 | 0,12 | 2160 | 4400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1GPF271MCAC◇◇50SE3 |
| | | 22 | 0,12 | 2160 | 2200 | 695* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1GPK271MCAC◇◇50E3 |
| | 330 | 18 | 0,12 | 2640 | 4400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1GPF331MCAC◇◇50SE3 |
| | | 18 | 0,12 | 2640 | 4500 | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1GEG331MC14◇◇50SE3 |
| | 390 | 18 | 0,12 | 3120 | 4500 | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1GEG391MC14◇◇50SE3 |
| 470 | 18 | 0,12 | 3760 | 4690 | - | 105 | 10 x 16 | 2 000 | 200 | PC HEG EG | PCR1GEG471MC16◇◇50SE3 | |
| 50 1H | 10 | 70 | 0,12 | 100 | 1400 | - | 105 | 5 x 5 | 3 000 | 300 | PC HPF PF | PCR1HPF100ME05◇◇20SE3 |
| | 12 | 70 | 0,12 | 120 | 1400 | - | 105 | 5 x 5 | 3 000 | 300 | PC HPF PF | PCR1HPF120ME05◇◇20SE3 |
| | 18 | 48 | 0,12 | 180 | 1100 | 347* | 125 | 6,3 x 5 | 2 000 | 200 | PC HPK PK | PCR1HPK180MF05◇◇25E3 |
| | | 40 | 0,12 | 220 | 2200 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1HPF220MF05◇◇25SE3 |
| | 22 | 48 | 0,12 | 220 | 1100 | 347* | 125 | 6,3 x 5 | 2 000 | 200 | PC HPK PK | PCR1HPK220MF05◇◇25E3 |
| | | 42 | 0,12 | 330 | 1300 | 411* | 125 | 6,3 x 8 | 2 000 | 200 | PC HPK PK | PCR1HPK330MF08◇◇25E3 |
| | 33 | 35 | 0,12 | 330 | 2600 | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1HPF330MB06◇◇35SE3 |
| | | 42 | 0,12 | 330 | 1300 | 411* | 125 | 8 x 6 | 2 000 | 200 | PC HPK PK | PCR1HPK330MB06◇◇35E3 |
| | | 35 | 0,12 | 390 | 2600 | - | 105 | 6,3 x 8 | 3 000 | 300 | PC HPF PF | PCR1HPF390MF08◇◇25SE3 |
| | 39 | 42 | 0,12 | 390 | 1300 | 411* | 125 | 6,3 x 8 | 2 000 | 200 | PC HPK PK | PCR1HPK390MF08◇◇25E3 |
| | | 35 | 0,12 | 390 | 2600 | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1HPF390MB06◇◇35SE3 |
| | | 42 | 0,12 | 390 | 1300 | 411* | 125 | 8 x 6 | 2 000 | 200 | PC HPK PK | PCR1HPK390MB06◇◇35E3 |
| | 47 | 35 | 0,12 | 470 | 1650 | 521* | 125 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1HPK470MB08◇◇35E3 |
| | | 29 | 0,12 | 560 | 3300 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1HPF560MB08◇◇35SE3 |
| | 56 | 35 | 0,12 | 560 | 1650 | 521* | 125 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1HPK560MB08◇◇35E3 |
| | | 29 | 0,12 | 680 | 3300 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1HPF680MB08◇◇35SE3 |
| | 68 | 35 | 0,12 | 680 | 1650 | 521* | 125 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1HPK680MB08◇◇35E3 |
| | | 25 | 0,12 | 820 | 3800 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1HPF820MBAB◇◇35SE3 |
| | 82 | 20 | 0,12 | 820 | 1900 | 600* | 125 | 8 x 11,5 | 2 000 | 200 | PC HPK PK | PCR1HPK820MBAB◇◇35E3 |
| | | 25 | 0,12 | 1000 | 3800 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1HPF101MBAB◇◇35SE3 |
| | 100 | 30 | 0,12 | 1000 | 1900 | 600* | 125 | 8 x 11,5 | 2 000 | 200 | PC HPK PK | PCR1HPK101MBAB◇◇35E3 |
| | | 20 | 0,12 | 1000 | 4300 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1HPF101MCAC◇◇50SE3 |
| | | 24 | 0,12 | 1000 | 2150 | 679* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1HPK101MCAC◇◇50E3 |
| | 120 | 20 | 0,12 | 1200 | 4300 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1HPF121MCAC◇◇50SE3 |

*Under certain conditions the currents can reach the value of 105°C. Please ask your Jianghai Europe Sales Office for approval.

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| U _{RDC} Rated Voltage Code | C _R Rated Capacitance | ESR _{max} Equivalent Series Resistance | tanδ Dissipation Factor | I _{leak} Leakage Current | I _{max,105°C} Max. Allowed Ripple Current | I _{max,125°C} Max. Allowed Ripple Current | T ₀ Operating Temperature | Size øD x L | L _e Endurance Life Time | L _o Operational Life Time | Series | Ordercode |
|--|-------------------------------------|--|----------------------------|--------------------------------------|---|---|---|----------------|--|---|-----------------------|--|
| (V) | (µF) | (mΩ) | 20°C 120Hz | (µA) | ≤105°C 100kHz | 105°C < T ≤ 125°C 100kHz | (°C) | (mm) | U _R , T ₀ (h) | U _R , T ₀ , I _{max} (h) | | ◇◇ = pin style & length Details: Page 168 |
| 50 1H | 120 | 24 | 0,12 | 1200 | 2150 | 679* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1HPK121MCAC◇◇50SE3 |
| | 150 | 20 | 0,12 | 1500 | 4300 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1HPF151MCAC◇◇50SE3 |
| | | 24 | 0,12 | 1500 | 2150 | 679* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1HPK151MCAC◇◇50SE3 |
| | 180 | 22 | 0,12 | 1800 | 4100 | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1HEG181MC14◇◇50SE3 |
| | 220 | 20 | 0,12 | 2200 | 4300 | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1HEG221MC14◇◇50SE3 |
| | 270 | 18 | 0,12 | 2700 | 4500 | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1HEG271MC14◇◇50SE3 |
| 330 | 20 | 0,12 | 3300 | 4950 | - | 105 | 10 x 16 | 2 000 | 200 | PC HEG EG | PCR1HEG331MC16◇◇50SE3 | |
| 63 1J | 10 | 50 | 0,12 | 126 | 1950 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1JPF100MF05◇◇25SE3 |
| | | 60 | 0,12 | 126 | 975 | 308* | 125 | 6,3 x 5 | 2 000 | 200 | PC HPK PK | PCR1JPK100MF05◇◇25SE3 |
| | 12 | 50 | 0,12 | 152 | 1950 | - | 105 | 6,3 x 5 | 3 000 | 300 | PC HPF PF | PCR1JPF120MF05◇◇25SE3 |
| | | 60 | 0,12 | 152 | 975 | 308* | 125 | 6,3 x 5 | 2 000 | 200 | PC HPK PK | PCR1JPK120MF05◇◇25SE3 |
| | 22 | 45 | 0,12 | 278 | 2350 | - | 105 | 6,3 x 8 | 3 000 | 300 | PC HPF PF | PCR1JPF220MF08◇◇25SE3 |
| | | 54 | 0,12 | 278 | 1175 | 371* | 125 | 6,3 x 8 | 2 000 | 200 | PC HPK PK | PCR1JPK220MF08◇◇25SE3 |
| | | 45 | 0,12 | 278 | 2350 | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1JPF220MB06◇◇35SE3 |
| | 27 | 54 | 0,12 | 278 | 1175 | 371* | 125 | 8 x 6 | 2 000 | 200 | PC HPK PK | PCR1JPK220MB06◇◇35SE3 |
| | | 54 | 0,12 | 341 | 1175 | 371* | 125 | 6,3 x 8 | 2 000 | 200 | PC HPK PK | PCR1JPK270MF08◇◇25SE3 |
| | | 45 | 0,12 | 341 | 2350 | - | 105 | 8 x 6 | 3 000 | 300 | PC HPF PF | PCR1JPF270MB06◇◇35SE3 |
| | 33 | 54 | 0,12 | 341 | 1175 | 371* | 125 | 8 x 6 | 2 000 | 200 | PC HPK PK | PCR1JPK270MB06◇◇35SE3 |
| | | 30 | 0,12 | 416 | 3200 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1JPF330MB08◇◇35SE3 |
| | 39 | 36 | 0,12 | 416 | 1600 | 506* | 125 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1JPK330MB08◇◇35SE3 |
| | | 30 | 0,12 | 492 | 3200 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1JPF390MB08◇◇35SE3 |
| | 47 | 36 | 0,12 | 492 | 1600 | 506* | 125 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1JPK390MB08◇◇35SE3 |
| | | 26 | 0,12 | 592 | 3600 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1JPF470MBAB◇◇35SE3 |
| | 56 | 31 | 0,12 | 593 | 1800 | 569* | 125 | 8 x 11,5 | 2 000 | 200 | PC HPK PK | PCR1JPK470MBAB◇◇35SE3 |
| | | 26 | 0,12 | 706 | 3600 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1JPF560MBAB◇◇35SE3 |
| | 68 | 31 | 0,12 | 706 | 1800 | 569* | 125 | 8 x 11,5 | 2 000 | 200 | PC HPK PK | PCR1JPK560MBAB◇◇35SE3 |
| | | 22 | 0,12 | 706 | 4100 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1JPF560MCAC◇◇50SE3 |
| | 82 | 22 | 0,12 | 857 | 4100 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1JPF680MCAC◇◇50SE3 |
| | | 22 | 0,12 | 1034 | 4100 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1JPF820MCAC◇◇50SE3 |
| | 100 | 27 | 0,12 | 1034 | 2000 | 632* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1JPK820MCAC◇◇50SE3 |
| | | 22 | 0,12 | 1260 | 4100 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1JPF101MCAC◇◇50SE3 |
| 120 | 27 | 0,12 | 1260 | 2000 | 632* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1JPK101MCAC◇◇50SE3 | |
| | 22 | 0,12 | 1512 | 4100 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1JPF121MCAC◇◇50SE3 | |
| 150 | 22 | 0,12 | 1890 | 4100 | - | 105 | 10 x 14 | 2 000 | 200 | PC HEG EG | PCR1JEG151MC14◇◇50SE3 | |
| 180 | 20 | 0,12 | 2268 | 4950 | - | 105 | 10 x 16 | 2 000 | 200 | PC HEG EG | PCR1JEG181MC16◇◇50SE3 | |
| 80 1K | 22 | 36 | 0,12 | 352 | 2900 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1KPF220MB08◇◇35SE3 |
| | | 43 | 0,12 | 352 | 1450 | 458* | 125 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1KPK220MB08◇◇35SE3 |
| | 27 | 36 | 0,12 | 432 | 2900 | - | 105 | 8 x 8 | 3 000 | 300 | PC HPF PF | PCR1KPF270MB08◇◇35SE3 |
| | | 43 | 0,12 | 432 | 1450 | 458* | 125 | 8 x 8 | 2 000 | 200 | PC HPK PK | PCR1KPK270MB08◇◇35SE3 |
| | 33 | 32 | 0,12 | 528 | 3200 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1KPF330MBAB◇◇35SE3 |
| | | 38 | 0,12 | 528 | 1600 | 506* | 125 | 8 x 11,5 | 2 000 | 200 | PC HPK PK | PCR1KPK330MBAB◇◇35SE3 |
| | 39 | 32 | 0,12 | 624 | 3200 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR1KPF390MBAB◇◇35SE3 |
| | | 38 | 0,12 | 624 | 1600 | 506* | 125 | 8 x 11,5 | 2 000 | 200 | PC HPK PK | PCR1KPK390MBAB◇◇35SE3 |
| | 47 | 28 | 0,12 | 752 | 3600 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1KPF470MCAC◇◇50SE3 |
| | | 34 | 0,12 | 752 | 1800 | 569* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1KPK470MCAC◇◇50SE3 |
| 56 | 28 | 0,12 | 896 | 3600 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR1KPF560MCAC◇◇50SE3 | |
| | 34 | 0,12 | 896 | 1800 | 569* | 125 | 10 x 12,5 | 2 000 | 200 | PC HPK PK | PCR1KPK560MCAC◇◇50SE3 | |
| 100 2A | 12 | 36 | 0,12 | 240 | 3000 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR2APF120MBAB◇◇35SE3 |
| | 15 | 36 | 0,12 | 300 | 3000 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR2APF150MBAB◇◇35SE3 |
| | 22 | 32 | 0,12 | 440 | 3300 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR2APF220MCAC◇◇50SE3 |
| | 27 | 32 | 0,12 | 540 | 3300 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR2APF270MCAC◇◇50SE3 |
| 125 2B | 10 | 45 | 0,12 | 250 | 2700 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR2BPF100MBAB◇◇35SE3 |
| | 12 | 45 | 0,12 | 300 | 2700 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR2BPF120MBAB◇◇35SE3 |
| | 18 | 40 | 0,12 | 450 | 3000 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR2BPF180MCAC◇◇50SE3 |
| | 22 | 40 | 0,12 | 550 | 3000 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR2BPF220MCAC◇◇50SE3 |
| 160 2C | 8,2 | 70 | 0,12 | 263 | 2100 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR2CPF8R2MBAB◇◇35SE3 |
| | 10 | 60 | 0,12 | 320 | 2400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR2CPF100MCAC◇◇50SE3 |
| | 12 | 60 | 0,12 | 384 | 2400 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR2CPF120MCAC◇◇50SE3 |
| 200 2D | 4,7 | 120 | 0,12 | 188 | 1600 | - | 105 | 8 x 11,5 | 3 000 | 300 | PC HPF PF | PCR2DPF4R7MBAB◇◇35SE3 |
| | 8,2 | 100 | 0,12 | 328 | 1850 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR2DPF8R2MCAC◇◇50SE3 |
| | 10 | 100 | 0,12 | 400 | 1850 | - | 105 | 10 x 12,5 | 3 000 | 300 | PC HPF PF | PCR2DPF100MCAC◇◇50SE3 |

*Under certain conditions the currents can reach the value of 105°C. Please ask your Jianghai Europe Sales Office for approval.



Jianghai is offering a growing portfolio of solid Multilayer Conductive Polymeraluminum Chip-Capacitors in molded plastic case.



ITEM CHARACTERISTICS

| | |
|-------------------------------------|---|
| Operating Temperature Range (°C) | -55 ~ +105 |
| Voltage Range (V) | 2 ~ 25 |
| Capacitance Range (µF) | 6,8 ~ 560 |
| Capacitance Tolerance (20°C, 120Hz) | ± 20% |
| Surge Voltage (V) | $U_R * 1,25$ |
| Dissipation Factor | ≤ 0,06 |
| Temperature Stability | $Z_{105°C} / Z_{20°C} \leq 1,25$ $Z_{-55°C} / Z_{+20°C} \leq 1,25$ |
| Endurance* | $L_e = 2\ 000h$ |

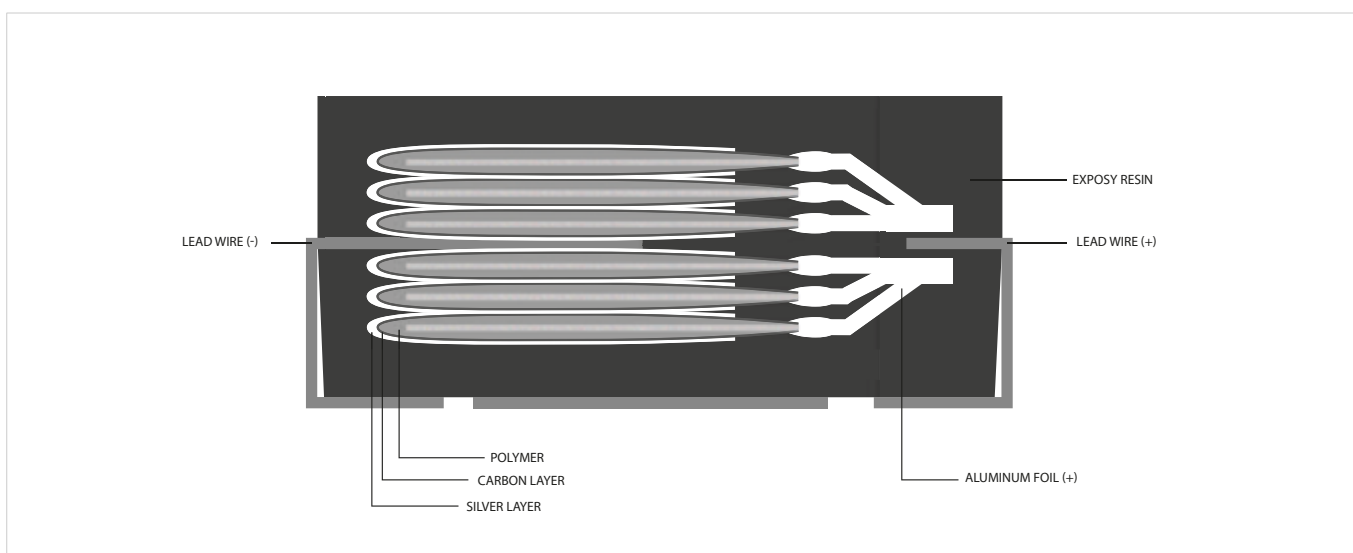
! The usage at lower temperatures than indicated may be possible. Please contact the Jianghai Europe sales office for approval.

*see details in datasheet

DIMENSIONS

| | L +0,3/-0,1 | W ₁ +0,3/-0,1 | H +0,3/-0,1 | P +/-0,3 | W ₂ +/-0,1 |
|--------|----------------|-----------------------------|----------------|-------------|--------------------------|
| Type V | 7,3 | 4,3 | 1,9 | 1,3 | 2,4 |
| Type D | 7,3 | 4,3 | 2,8 | 1,3 | 2,4 |

INTERNAL STRUCTURE PRINCIPLE (EXAMPLE)



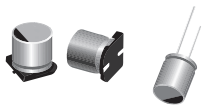
For detailed information, datasheets and samples please contact Jianghai Europe.

SERIES POLYMER STACKED CHIP

| SERIES | CODE | TYPE | TEMPERATURE | VOLTAGE | LIFETIME | INFO |
|--------|------|---------|-------------|---------|----------|-------------|
| PC HPA | PA | Stacked | 105°C | 2-25V | 2 000h | Standard |
| PC HPS | PS | Stacked | 105°C | 2-10V | 2 000h | Low Profile |

OTHER SERIES ON REQUEST

SOLID POLYMER STACKED



Jianghai is offering a growing portfolio of Hybrid Conductive Polymer Capacitors in SMD and Radial version in two different temperature classes: 105°C and 125°C.

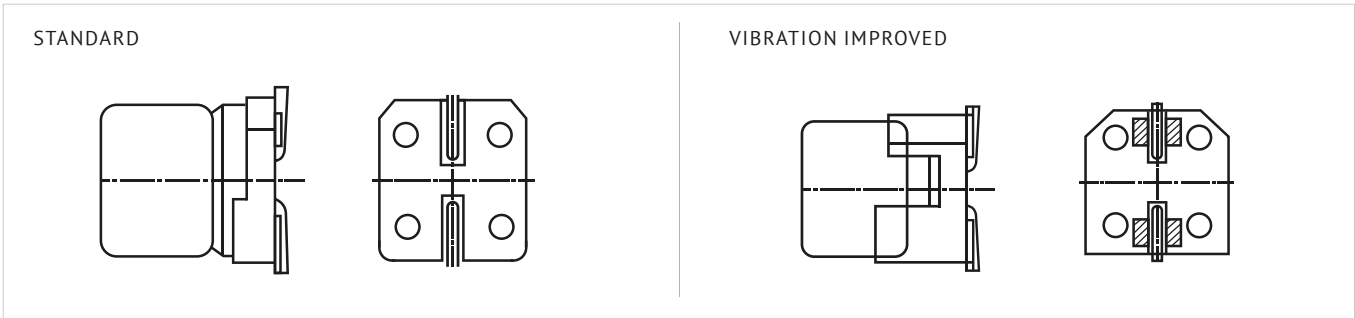
ITEM CHARACTERISTICS

| | |
|-------------------------------------|--|
| Operating Temperature Range (°C) | -55 ~ +105 and -55 ~ +125 |
| Voltage Range (V) | 25 ~ 80 |
| Capacitance Range (µF) | 22 ~ 680 |
| Capacitance Tolerance (20°C, 120Hz) | ± 20% |
| Surge Voltage (V) | $U_R * 1,15$ |
| Endurance* | $L_e = 5\ 000h$ at 105°C and $L_e = 4\ 000h$ at 125° |

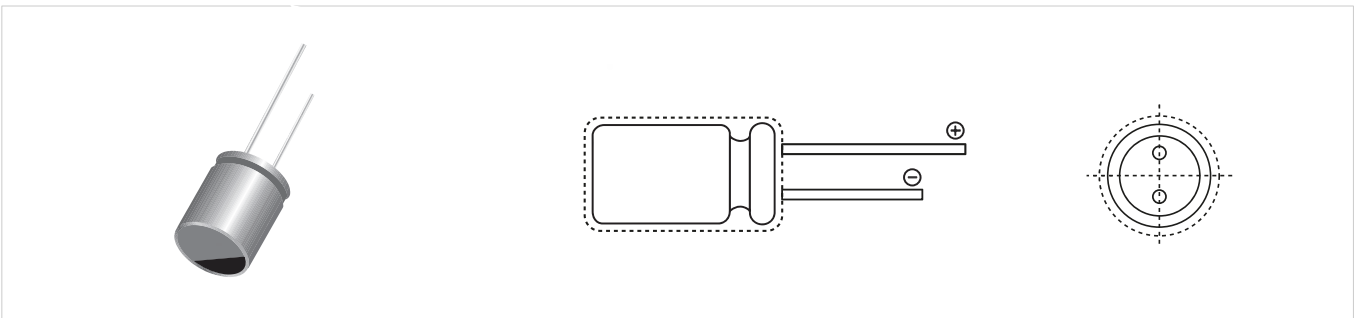
! The usage at lower temperatures than indicated may be possible. Please contact the Jianghai Europe sales office for approval.

*see details in datasheet

SMD: SCHEMATIC DIAGRAM



RADIAL: SCHEMATIC DIAGRAM



For detailed information, datasheets and samples please contact Jianghai Europe.

SERIES HYBRID POLYMER

| SERIES | CODE | TYPE | TEMPERATURE | VOLTAGE | LIFETIME | INFO |
|--------|------|--------|-------------|---------|----------|------------------|
| PH VA | VA | SMD | 105°C | 25-80V | 5 000h | Standard |
| PH VB | VB | SMD | 125°C | 25-80V | 4 000h | High Temperature |
| PH LA | LA | Radial | 105°C | 25-80V | 5 000h | Standard |
| PH LB | LB | Radial | 125°C | 25-80V | 4 000h | High Temperature |





CAPACITOR COMPETENCE

since 1958

JIANGHAI EUROPE

Electronic Components GmbH



ENGINEERED SOLUTIONS

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