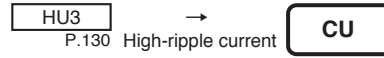


CU Series Useful of 4,000 hours at 105°C

- Conform RoHS

Features

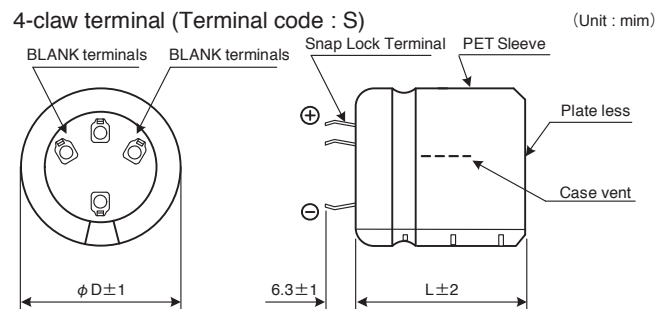
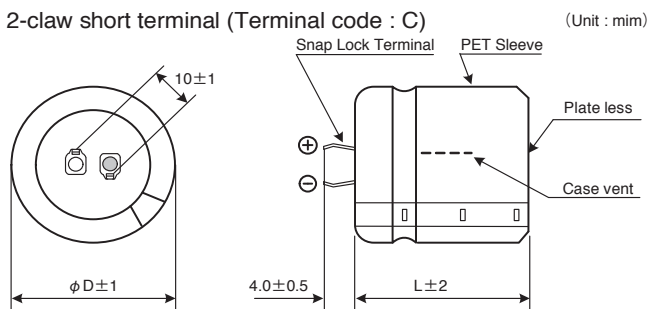
- CU series has higher ripple current (ave 30%) compared with HU3 series. These features are accomplished by new heat radiation.
- The vent is located in the side of the case.



Product Specifications

| Items | Specifications |
|----------------------------|---|
| Temperature range | -25°C ~ +105°C |
| Rated voltage | 400 ~ 500V.DC |
| Capacitance tolerance | ±20% (20°C, 120Hz) |
| Leakage current | 0.02CV (µA) or 5mA, whichever is smaller or less (20°C, after 5 minutes) [C = nominal capacitance (µF), V = rated voltage (V)] |
| Dissipation factor | Less than the value specified in the standard products table. (20°C, 120Hz) |
| Permissible ripple current | As specified in the standard product table. (105°C, 120Hz) |
| Endurance | After the rated voltage with specified ripple current is applied at 105°C for 2,000 hours : Capacitance change : Within ±20% of the initial value measured Dissipation factor : 200% or less than the initial value specified Leakage current : Less than or equal to the initial value specified |
| Shelf life | The following specification shall be met when the capacitor are restored to 20°C after storage of 500 hours at 105°C with no voltage applied. Before the measurement, the capacitor shall be preconditioned by applying the voltage treatment according to Item 4.1 of JIS C 5101-4. Capacitance change : Within ±15% of the initial value measured Dissipation factor : 175% or less than the initial value specified Leakage current : Less than or equal to the initial value specified |
| Others | JIS C 5101-4 |
| Notes to users | The vent position is not fixed. Please do not set up an obstacle to circumference less than 1mm. |

Dimensions

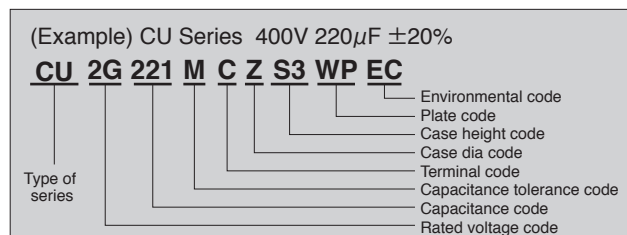


Ripple current correction coefficient

| | | | | |
|------------------------|------|-------|-----|------|
| Temperature (°C) | 60 | 70 | 85 | 105 |
| Correction coefficient | 1.9 | 1.7 | 1.4 | 1.0 |
| Frequency (Hz) | 120 | 300 | 1K | ≥10K |
| Correction coefficient | 1.0 | 1.1 | 1.3 | 1.4 |
| Forced wind (m / s) | <0.5 | 0.5 ≤ | | |
| Correction coefficient | 1.0 | 1.1 | | |

A continuous load should be avoided over 10 Arms at the terminal in accordance with the permissible current. Please consult us when the ripple voltage exceeds 70Vp-p.

Product code



Refer to page 124-125 for other terminal shape available on request.

Standard Products Table

| Rated Voltage (V. DC) | Capacitance (μF) | Case size φD×L (mm) | tanδ 20°C, 120Hz | Ripple current | ESR(typ.) | Product name |
|-----------------------|------------------|---------------------|------------------|---------------------|------------------|-------------------|
| | | | | (Arms) 105°C, 120Hz | (mΩ) 20°C, 100Hz | |
| 400 | 220 | 30×30 | 0.20 | 1.57 | 320 | CU2G221MCZS3WPEC |
| | | 30×35 | 0.20 | 1.79 | 260 | CU2G271MCZS4WPEC |
| | 270 | 35×31 | 0.20 | 1.85 | 260 | CU2G271MCAS3WPEC |
| | | 30×40 | 0.20 | 2.03 | 210 | CU2G331MCZS5WPEC |
| | 330 | 35×36 | 0.20 | 2.10 | 210 | CU2G331MCAS4WPEC |
| | | 30×50 | 0.20 | 2.28 | 190 | CU2G391MCZS7WPEC |
| | 390 | 35×41 | 0.20 | 2.33 | 190 | CU2G391MCAS5WPEC |
| | | 30×60 | 0.20 | 2.57 | 160 | CU2G471MCZS9WPEC |
| | 470 | 35×46 | 0.20 | 2.61 | 160 | CU2G471MCAS6WPEC |
| | | 35×51 | 0.20 | 2.89 | 130 | CU2G561MCAS7WPEC |
| | 560 | 40×40 | 0.20 | 2.64 | 130 | CU2G561MSBS5WPEC |
| | | 35×61 | 0.20 | 3.25 | 110 | CU2G681MCAS9WPEC |
| | 680 | 40×45 | 0.20 | 2.95 | 110 | CU2G681MSBS6WPEC |
| | | 35×81 | 0.20 | 3.62 | 90 | CU2G821MSAS13WPEC |
| 820 | 40×61 | 0.20 | 3.35 | 90 | CU2G821MSBS9WPEC | |
| | 1,200 | 40×83 | 0.20 | 4.08 | 90 | CU2G122MSBS13WPEC |
| 450 | 150 | 30×30 | 0.20 | 1.30 | 490 | CU2W151MCZS3WPEC |
| | 180 | 30×35 | 0.20 | 1.46 | 420 | CU2W181MCZS4WPEC |
| | 220 | 30×40 | 0.20 | 1.66 | 340 | CU2W221MCZS5WPEC |
| | | 35×31 | 0.20 | 1.67 | 340 | CU2W221MCAS3WPEC |
| | 270 | 35×36 | 0.20 | 1.90 | 280 | CU2W271MCAS4WPEC |
| | 330 | 30×50 | 0.20 | 2.10 | 230 | CU2W331MCZS7WPEC |
| | | 35×41 | 0.20 | 2.15 | 230 | CU2W331MCAS5WPEC |
| | 390 | 30×60 | 0.20 | 2.34 | 200 | CU2W391MCZS9WPEC |
| | | 35×46 | 0.20 | 2.37 | 200 | CU2W391MCAS6WPEC |
| | 470 | 35×51 | 0.20 | 2.64 | 160 | CU2W471MCAS7WPEC |
| | | 40×40 | 0.20 | 2.42 | 160 | CU2W471MSBS5WPEC |
| | 560 | 35×61 | 0.20 | 2.95 | 140 | CU2W561MCAS9WPEC |
| | | 40×45 | 0.20 | 2.68 | 140 | CU2W561MSBS6WPEC |
| | 680 | 35×81 | 0.20 | 3.30 | 110 | CU2W681MSAS13WPEC |
| | | 40×50 | 0.20 | 2.98 | 110 | CU2W681MSBS7WPEC |
| | 1,000 | 40×83 | 0.20 | 3.72 | 90 | CU2W102MSBS13WPEC |
| 500 | 120 | 30×30 | 0.20 | 1.05 | 460 | CU2H121MCZS3WPEC |
| | 150 | 30×35 | 0.20 | 1.21 | 460 | CU2H151MCZS4WPEC |
| | 180 | 30×40 | 0.20 | 1.36 | 390 | CU2H181MCZS5WPEC |
| | | 35×31 | 0.20 | 1.40 | 390 | CU2H181MCAS3WPEC |
| | 220 | 30×50 | 0.20 | 1.56 | 320 | CU2H221MCZS7WPEC |
| | | 35×36 | 0.20 | 1.59 | 320 | CU2H221MCAS4WPEC |
| | 270 | 30×60 | 0.20 | 1.78 | 260 | CU2H271MCZS9WPEC |
| | | 35×41 | 0.20 | 1.80 | 260 | CU2H271MCAS5WPEC |
| | 330 | 35×46 | 0.20 | 2.03 | 210 | CU2H331MCAS6WPEC |
| | 390 | 35×51 | 0.20 | 2.25 | 180 | CU2H391MCAS7WPEC |
| | 470 | 35×61 | 0.20 | 2.52 | 160 | CU2H471MCAS9WPEC |

Life time graph

Useful life depending on ambient temperature T_a and ripple current operating conditions I versus rated ripple current at 105°C, 120Hz

