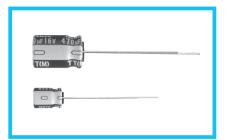


Miniature Sized, Low Impedance, High Reliability For Switching Power Supplies



- Smaller case size and Long Life product.
- Compliant to the RoHS directive (2011/65/EU).

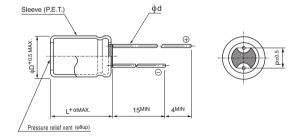




■Specifications

| Item | Performance Characteristics | | | | | | | | | | |
|-------------------------------|--|---|----------------|------|-------|---------------|--|--------------------|------------------------|--|--|
| Category Temperature Range | -40 to +105°C | | | | | | | | | | |
| Rated Voltage Range | 6.3 to 50V | 3 to 50V | | | | | | | | | |
| Rated Capacitance Range | 1 to 470μF | ιο 470μF | | | | | | | | | |
| Capacitance Tolerance | ±20% at 120Hz, 2 | 0% at 120Hz, 20°C | | | | | | | | | |
| Leakage Current | After 2 minutes' app | fter 2 minutes' application of rated voltage at 20°C, leakage current is less than 0.03CV or 3 (μA), whichever is greater. | | | | | | | | | |
| | | | | | | | Measure | ement frequenc | y : 120Hz at 20°C | | |
| Tangent of loss angle (tan δ) | Rated voltage (V) | 6.3 | 10 | 16 | 25 | | | 35 | 50 | | |
| | tan δ (MAX.) | 0.30 | 0.28 | 0.24 | 1 | 0.18 | | 0.16 | 0.14 | | |
| | Measurement frequency : 120Hz | | | | | | | | | | |
| Ctability at Law Tawaranatura | Rated voltage (V) | | 6.3 | 10 | | 16 | 25 | 35 | 50 | | |
| Stability at Low Temperature | Impedance ratio | Z-25°C / Z+20°C | 5 | 4 | | 3 | 3 | 3 | 3 | | |
| | ZT / Z20 (MAX.) | Z-40°C / Z+20°C | 10 | 10 | | 8 | Measurement frequency : 120Hz at 25 35 50 0.18 0.16 0.14 | 4 | | | |
| | The specifications I | isted at right shall b | e met when the | | Capac | itance change | Within ±30° | % of the initial c | apacitance value | | |
| Endurance | capacitors are restored to 20°C after the rated voltage is | | | | | | 300% or less than the initial specified value | | | | |
| | applied for 5000 hours at 105°C. Leakage current Less than or equal to the initial specified v | | | | | | | | nitial specified value | | |
| Shelf Life | _ | After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above. | | | | | | | | | |
| Marking | Printed with white c | olor letter on dark b | olown sleeve. | | | | | | | | |

■Radial Lead Type



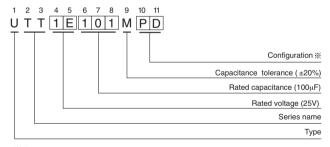
| | (L = 7) 1.0 |
|---|-------------|
| α | (L ≥ 9) 1.5 |

| | (mm) | | | | | | | | | |
|----------|--------------------------------|------|---------------|-----|--|--|--|--|--|--|
| φD | 4 | 5 | 6.3 | 8 | | | | | | |
| Р | 1.5 | 2.0 | 2.5 | 3.5 | | | | | | |
| φd | 0.45 | 0.45 | 0.5 (0.45) | 0.6 | | | | | | |
| (): App | () : Applied to 7mmL products | | | | | | | | | |

Please refer to page 20 about the end seal configuration.

Please refer to page 4 for the minimum order quantity.

Type numbering system (Example: 25V 100μF)



| * Configuration | | | | | | | |
|-----------------|--|--|--|--|--|--|--|
| φD | Pb-free leadwire Pb-free PET sleeve | | | | | | |
| 4 to 6.3 | DD | | | | | | |
| 8 | PD | | | | | | |

Please refer to page 20, 21, 22 about the formed or taped product spec.



■Dimensions

| | V (Code) | | 6.3 (0J) | | 10 (1A) | | | 16 (1C) | | |
|----------|--------------|-----------------------------------|--|---|-----------------------------|--|---|-----------------------------|--|---|
| Cap.(µF) | Item Code | Case size ϕ D × L (mm) | Impedance (Ω) MAX. 20°C / 100kHz | Rated ripple (mArms) 105°C / 100kHz | Case size φD × L (mm) | Impedance (Ω) MAX. 20°C / 100kHz | Rated ripple (mArms) 105°C / 100kHz | Case size φD × L (mm) | Impedance (Ω) MAX. 20°C / 100kHz | Rated ripple (mArms) 105°C / 100kHz |
| 10 | 100 | | | | | | | 4 × 7 | 7.4 | 46 |
| 22 | 220 | 4 × 7 | 7.4 | 46 | | | | 5 × 7 | 4.0 | 74 |
| 33 | 330 | | | | 5 × 7 | 4.0 | 74 | | | |
| 47 | 470 | 5 × 7 | 4.0 | 74 | | | | 6.3 × 7 | 2.1 | 120 |
| 100 | 101 | 6.3 × 7 | 2.1 | 120 | | | | 6.3 × 9 | 1.1 | 163 |
| 150 | 151 | | | | 6.3×9 | 1.1 | 163 | 8 × 9 | 0.68 | 230 |
| 220 | 221 | 6.3 × 9 | 1.1 | 163 | 8 × 9 | 0.68 | 230 | 8 × 9 | 0.68 | 230 |
| 330 | 331 | 8 × 9 | 0.68 | 230 | | | | 8 × 9 | 0.68 | 230 |
| 470 | 471 | 8 × 9 | 0.68 | 230 | | | | 8 × 11.5 | 0.40 | 298 |

| | V (Code) 25 (1E) 35 (1V) | | | 50 (1H) | | | | | | |
|----------|--------------------------|-----------------------------|--|---|-----------------------------|--|---|-----------------------------|--|---|
| Cap.(µF) | Item Code | Case size φD × L (mm) | Impedance (Ω) MAX. 20°C / 100kHz | Rated ripple (mArms) 105°C / 100kHz | Case size φD × L (mm) | Impedance (Ω) MAX. 20°C / 100kHz | Rated ripple (mArms) 105°C / 100kHz | Case size φD × L (mm) | Impedance (Ω) MAX. 20°C / 100kHz | Rated ripple (mArms) 105°C / 100kHz |
| 1 | 010 | | | | | | | 4 × 7 | 30 | 23 |
| 2.2 | 2R2 | | | | | | | 4 × 7 | 23 | 26 |
| 3.3 | 3R3 | | | | | | | 4 × 7 | 20 | 29 |
| 4.7 | 4R7 | | | | 4 × 7 | 7.4 | 37 | 5 × 7 | 14 | 37 |
| 10 | 100 | | | | 5 × 7 | 4.0 | 74 | 6.3×7 | 4.4 | 84 |
| 22 | 220 | 5 × 7 | 4.0 | 74 | 6.3 × 7 | 2.1 | 120 | 6.3 × 9 | 2.4 | 112 |
| 33 | 330 | 6.3 × 7 | 2.1 | 120 | 6.3 × 9 | 1.1 | 163 | | | |
| 47 | 470 | 6.3 × 9 | 1.1 | 163 | 6.3 × 9 | 1.1 | 163 | 8 × 9 | 1.4 | 162 |
| 100 | 101 | 8 × 9 | 0.68 | 230 | | | | | | |
| 150 | 151 | | | | | | | | | |
| 220 | 221 | 8 × 11.5 | 0.40 | 298 | | | | | | |
| 330 | 331 | 8 × 11.5 | 0.40 | 298 | | | | | | |

• Frequency coefficient of rated ripple current

| Cap. (µF) | 50Hz | 120Hz | 300Hz | 1kHz | 10kHz | 100kHz or more |
|------------|------|-------|-------|------|-------|----------------|
| 1 to 4.7 | 0.25 | 0.30 | 0.50 | 0.70 | 0.90 | 1.00 |
| 10 to 47 | 0.30 | 0.40 | 0.60 | 0.75 | 0.90 | 1.00 |
| 100 to 470 | 0.60 | 0.60 | 0.70 | 0.80 | 0.90 | 1.00 |

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Nichicon:

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UTT1C331MPD UTT1E470MDD UTT0J101MDD UTT1C221MPD UTT1V220MDD UTT0J221MDD

UTT1H4R7MDD UTT1C470MDD UTT0J101MDD UTT1H3R3MDD UTT1H4R7MDD UTT1C220MDD

UTT0J470MDD UTT1E220MDD UTT1V470MDD UTT1V330MDD UTT1H2R2MDD UTT1C471MPD UTT0J471MPD

UTT0J331MPD UTT1H010MDD UTT1E330MDD UTT1V4R7MDD UTT1A151MDD UTT1A330MDD

UTT1C221MPD UTT1H220MDD UTT0J220MDD UTT1E331MPD UTT1V100MDD UTT1A221MPD UTT1C100MDD

UTT1C101MDD UTT1C151MPD UTT1E101MPD UTT1H220MDD1TD UTT1C151MPD1TD UTT1H2R2MDD1TP

UTT1C470MDD1TP UTT0J331MPD1TD UTT1E220MDD1TP UTT0J221MDD1TD UTT1A151MDD1TD

UTT0J471MPD1TD UTT1V330MDD1TD UTT1H470MPD1TD UTT1E330MDD1TP UTT1C100MDD1TP

UTT1C221MPD1TD UTT1A330MDD1TP UTT1E101MPD1TD UTT1E331MPD1TD UTT1V4R7MDD1TP

UTT1C331MPD1TD UTT1C471MPD1TD UTT1C101MDD1TD UTT0J101MDD1TP UTT1H3R3MDD1TP

UTT1C331MPD1TD UTT1V220MDD1TP UTT1C221MPD1TD UTT1H100MDD1TP UTT1H3R3MDD1TP

UTT0J220MDD1TP UTT1E470MDD1TD UTT1H4R7MDD1TP UTT1V100MDD1TP UTT1C220MDD1TP

UTT0J331MPD1TD UTT1C471MPD1TA UTT1H4R7MDD1TE UTT1E101MPD1TA UTT1V330MDD1TA

UTT0J331MPD1TA
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