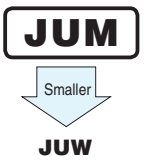
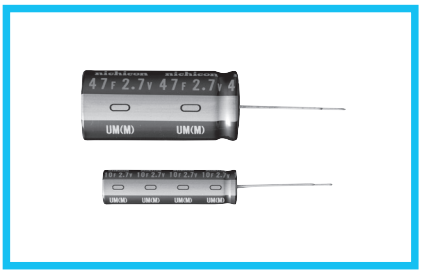
# JUM

Radial Lead Type, High Voltage

- High voltage type (2.7V).
- Suitable for quick charge and discharge.
- Wide temperature range (– 25 to +70°C).
- Compliant to the RoHS directive (2011/65/EU).

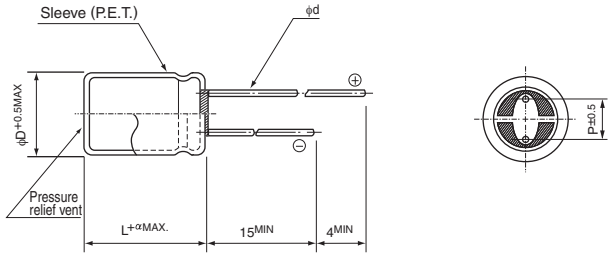


## ■Specifications

| Item | Performance Characteristics | | |
|---|---|---|---|
| Category Temperature Range | – 25 to +70°C | | |
| Rated Voltage Range | 2.7V | | |
| Rated Capacitance Range | 1 to 47F See Note | | |
| Capacitance Tolerance | ±20% , 20°C | | |
| Leakage Current | 0.5C (mA) [ C : Rated Capacitance(F)] (After 30 minutes' application of rated voltage : 2.7V) | | |
| Stability at Low Temperature | Capacitance (– 25°C) / Capacitance (+20°C) ×100 ≧ 70% | | |
| ESR, DCR* | Refer to the table below (20°C). *DC internal resistance | | |
| Endurance | The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 70°C. | Capacitance change | Within ±30% of the initial capacitance value |
| | | ESR | 300% or less than the initial specified value |
| | | Leakage current | Less than or equal to the initial specified value |
| Shelf Life | The specifications listed at right shall be met when the capacitors are restored to 20°C after storing the capacitors under no load for 1000 hours at 70°C. | Capacitance change | Within ±30% of the initial capacitance value |
| | | ESR | 300% or less than the initial specified value |
| | | Leakage current | Less than or equal to the initial specified value |
| Marking | Printed with white color letter on black sleeve. | | |

## ■Drawing




(mm)

| φD | 8 | 10 | 12.5 | 16 | 18 |
|---|---|---|---|---|---|
| P | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| φd | 0.6 | 0.6 | 0.6※ | 0.8 | 0.8 |

| α | (φD < 10) 1.5 |
|---|---|
| | (φD ≧10) 2.0 |

※ In case L>25 for the φ12.5 dia unit, lead dia φd=0.8

• Please refer to page 20 for end seal configuration.

## Type numbering system (Example : 2.7V 10F)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|
| J | U | M | T | 1 | 1 | 0 | 6 | M | H | D |

Configuration ※
Capacitance tolerance (±20%)
Rated capacitance (10F)
Rated voltage (2.7V)
Series name
Type

※ Configuration

| φ D | Pb-free lead finishing Pb-free PET sleeve |
|---|---|
| 8・10 | PD |
| 12.5 to 18 | HD |

## ■Dimensions

| Rated Voltage ( Code ) | Rated Capacitance (F) | Code | ESR (Ω) (at 1kHz) | DCR※ Typical (Ω) | Case size φ D × L (mm) |
|---|---|---|---|---|---|
| 2.7V (T1) | 1 | 105 | 2 | 3 | 8 × 11.5 |
| | 2.2 | 225 | 2 | 1.3 | 8 × 20 |
| | 3.3 | 335 | 1 | 1.0 | 10 × 20 |
| | 4.7 | 475 | 0.4 | 0.6 | 12.5 × 20 |
| | 10 | 106 | 0.2 | 0.25 | 12.5 × 31.5 |
| | 22 | 226 | 0.2 | 0.13 | 16 × 31.5 |
| | 33 | 336 | 0.1 | 0.08 | 18 × 31.5 |
| | 47 | 476 | 0.1 | 0.06 | 18 × 40 |

Note :
The capacitance calculated from discharge time (ΔT) with constant current ( i ) after 30minuite charge with rated voltage (2.7V).
The discharge current ( i ) is 0.01 × rated capacitance (F).
The discharge time (ΔT) measured between 2V and 1V with constant current.
The capacitance calculated bellow.
Capacitance (F) = i × ΔT

※ The listed DCR value is typical and therefore not a guaranteed value.