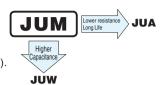


Radial Lead Type, Standard

- Standard type (2.7V).
- Suitable for quick charge and discharge.
- Wide temperature range (- 25 to +70°C).
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

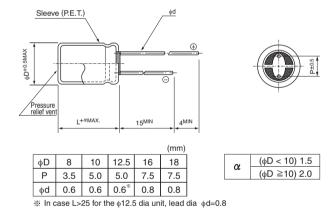




Specifications

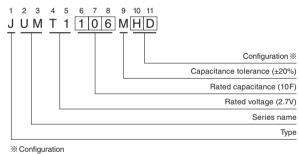
Item	Performance Characteristics						
Category Temperature Range	− 25 to +70°C						
Rated Voltage Range	2.7V						
Rated Capacitance Range	1 to 47F See Note						
Capacitance Tolerance	±20%, 20°C						
Stability at Low Temperature	Capacitance (- 25°C) / Capacitance (+20°C) ×100 ≥ 70% ESR (- 25°C) / ESR (+20°C) ≤ 4						
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 ESR	Within ±30% of the initial capacitance value 300% or less than 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 ESR	Within ±30% of the initial capacitance value 300% or less than the initial specified value				
Humidity Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 500 hours at 40°C 90%RH.	Capacitance change ESR	Within ±30% of the initial capacitance value 300% or less than the initial specified value				
Marking	Printed with white color letter on black sleeve.						

Drawing



• Please refer to page 18 for end seal configuration.

Type numbering system (Example: 2.7V 10F)



※ Configuration					
φD	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)
	1	105	1.8	3	8 × 11.5
	2.2	225	1.0	1.3	8 × 20
	3.3	335	0.6	1.0	10 × 20
2.7V	4.7	475	0.4	0.6	12.5 × 20
(T1)	10	106	0.2	0.25	12.5 × 31.5
	22	226	0.07	0.13	16 × 31.5
	33	336	0.06	0.08	18 × 31.5
	47	476	0.05	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) = $i \times \Delta T$

^{*} The listed DCR value is typical and therefore not a guaranteed value.