

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).

Products which are scheduled to be discontinued. Not recommended for new designs.

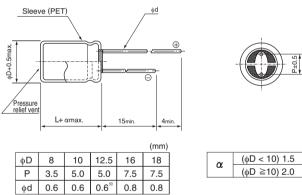
# Lower resistance Long Life Higher Capacitance JUW



### ■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	Capacitance change	Within ±30% of the initial capacitance value				
	are restored to 20°C after the rated voltage is applied for 1000 hours at $70^{\circ}$ C.	ESR	300% or less than the initial specified value				
Shelf Life	The specifications listed at right shall be met when the capacitors	Capacitance change	Within ±30% of the initial capacitance value				
	are restored to 20°C after storing the capacitors under no load for 1000 hours at 70°C.	ESR	300% or less than the initial specified value				
	16. 1000 Hours at 70 G.						
Humidity Endurance	The specifications listed at right shall be met when the capacitors	Capacitance change	Within ±30% of the initial capacitance value				
	are restored to 20°C after the rated voltage is applied for 500 hours at $40^{\circ}\text{C}$ 90%RH.	ESR	300% or less than the initial specified value				
Marking	Printed with white color letter on black sleeve.						

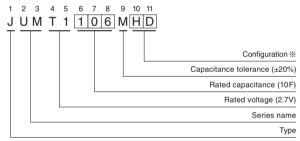
### Drawing



% In case L>25 for the  $\phi$ 12.5 dia unit, lead dia  $\phi$ d=0.8

 Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

# 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)
2.7V (T1)	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
	4.7	475	0.4	0.6	12.5 × 20
	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 ( $\Delta T$ ) with constant current ( i ) after 30minuite charge with rated voltage (2.7V).

The discharge current ( i ) is  $0.01 \times \text{rated capacitance}$  (F).

The discharge time ( $\Delta T$ ) measured between 2V and 1V with constant current.

The capacitance calculated bellow.

Capacitance (F) =  $i \times \Delta T$ 

<sup>\*</sup> The listed DCR value is typical and therefore not a guaranteed value.