



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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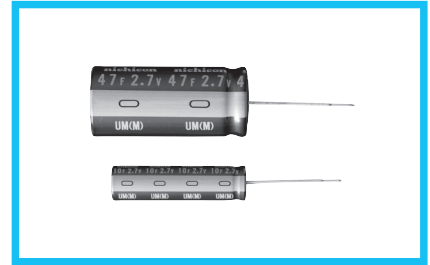
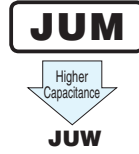
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# JUM

Radial Lead Type, Standard

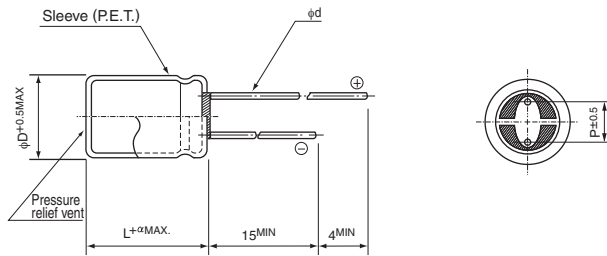
- Standard type (2.7V).
- Suitable for quick charge and discharge.
- Wide temperature range (-25 to +70°C).
- Compliant to the RoHS directive (2011/65/EU).



## 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.	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>ESR</td> <td>300% or less than the initial specified value</td> </tr> </table>	Capacitance change	Within ±30% of the initial capacitance value	ESR	300% or less than the initial specified value
	Capacitance change	Within ±30% of the initial capacitance value				
ESR	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.	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>ESR</td> <td>300% or less than the initial specified value</td> </tr> </table>	Capacitance change	Within ±30% of the initial capacitance value	ESR	300% or less than the initial specified value
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ESR	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.	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>ESR</td> <td>300% or less than the initial specified value</td> </tr> </table>	Capacitance change	Within ±30% of the initial capacitance value	ESR	300% or less than the initial specified value
	Capacitance change	Within ±30% of the initial capacitance value				
ESR	300% or less than the initial specified value					
Marking	Printed with white color letter on black sleeve.					

## Drawing

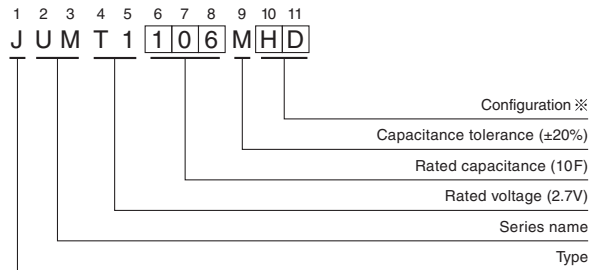


	(mm)				
φD	8	10	12.5	16	18
P	3.5	5.0	5.0	7.5	7.5
φd	0.6	0.6	0.6*	0.8	0.8

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

α	(φD < 10) 1.5
	(φD ≥ 10) 2.0

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



※ Configuration

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

• Please refer to page 20 for end seal configuration.

## 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 (ΔT) with constant current (i) after 30minute 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 below.

$$\text{Capacitance (F)} = i \times \Delta T$$

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