

ALUMINUM ELECTROLYTIC CAPACITORS

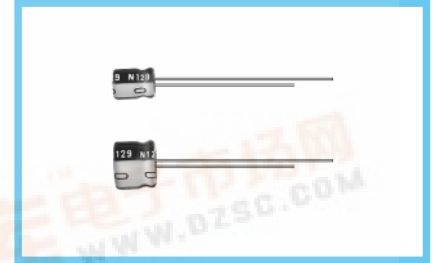
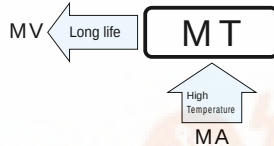
nichicon

MT

5mmL, Wide Temperature Range
series

Anti-Solvent
Feature

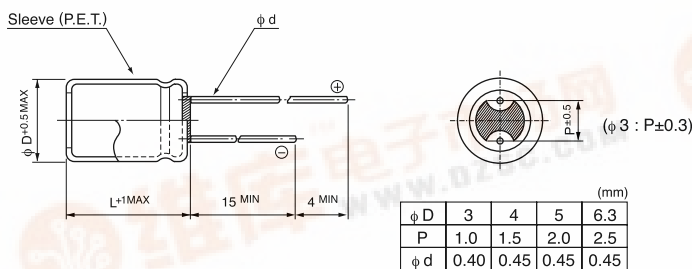
- Wide temperature range of $-55 \sim +105^{\circ}\text{C}$, with 5mm height.
- Adapted to the RoHS directive (2002/95/EC).



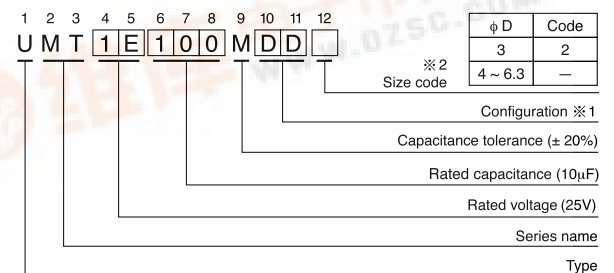
Specifications

Item	Performance Characteristics									
Category Temperature Range	-55 ~ +105℃									
Voltage Range	4 ~ 50V									
Rated Capacitance Range	0.1 ~ 100μF									
Rated Capacitance Tolerance	±20% at 120Hz, 20℃									
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μA), whichever is greater.									
tan δ	Measurement frequency : 120Hz, Temperature : 20℃									
	Rated voltage (V)	4	6.3	10	16	25	35	50	Figures in () are for φ 3 product.	
	tan δ (MAX.)	0.37	0.28	0.24	0.20	0.16	0.13 (0.14)	0.12 (0.14)		
Stability at Low Temperature	Measurement frequency : 120Hz									
	Rated voltage (V)		4	6.3	10	16	25	35	50	
	Impedance ratio	Z-25℃ / Z+20℃	6	3	3	2	2	2	2	
	ZT / Z20 (MAX.)	Z-40℃ / Z+20℃	12	8	5	4	3	3	3	
Endurance	After 1000 hours' application of rated voltage at 105℃, capacitors meet the characteristic requirements listed at right.				Capacitance change				Within ±25% of initial value (φ 3mm unit, and ≤ 16V) Within ±20% of initial value (≥ 25V)	
					tan δ				200% or less of initial specified value	
					Leakage current				Initial specified value or less	
Shelf Life	After storing the capacitors under no load at 105℃ for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20℃, they will meet the specified value for endurance characteristics listed above.									
Marking	Printed with white color letter on black sleeve.									

Radial Lead Type



- Please refer to page 21 about the end seal configuration.

Type numbering system (Example : 25V 10 μF)

ϕD	Pb-free leadwire Pb-free PET sleeve
3	CD
4 ~ 6.3	DD

※2 For $\phi 3\text{mm}$ unit, place size code of 2 to 12th digit.

Dimensions

V	4	6.3	10	16	25	35	50
Cap. (μF)	0G	0J	1A	1C	1E	1V	1H
0.1	0R1						• 4 $\times$ 5 1.0
0.22	R22						• 4 $\times$ 5 2.6
0.33	R33						• 4 $\times$ 5 3.2
0.47	R47						• 4 $\times$ 5 3.8
1	010						• 4 $\times$ 5 6.2 (5.9)
2.2	2R2					3 $\times$ 5 7.5	• 4 $\times$ 5 11 (9)
3.3	3R3					• 4 $\times$ 5 11 (9)	4 $\times$ 5 14
4.7	4R7					4 $\times$ 5 15	5 $\times$ 5 19
10	100				• 4 $\times$ 5 18 (14)	5 $\times$ 5 23	6.3 $\times$ 5 30
22	220	4 $\times$ 5 22	4 $\times$ 5 22	5 $\times$ 5 27	5 $\times$ 5 30	6.3 $\times$ 5 38	6.3 $\times$ 5 48
33	330	5 $\times$ 5 30	5 $\times$ 5 30	5 $\times$ 5 35	6.3 $\times$ 5 40	6.3 $\times$ 5 48	
47	470	5 $\times$ 5 36	5 $\times$ 5 36	6.3 $\times$ 5 46	6.3 $\times$ 5 50		
100	101	6.3 $\times$ 5 60	6.3 $\times$ 5 60				
Case size							Rated ripple
$\phi D \times L$ (mm)							

Size 03 ~ 5 is available for capacitors marked "•"
Figures in () are for $\phi 3$ product.

Rated Ripple (mArms) at 105°C 120Hz

Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz ~
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Please refer to page 21, 22, 23 about the formed or taped product spec