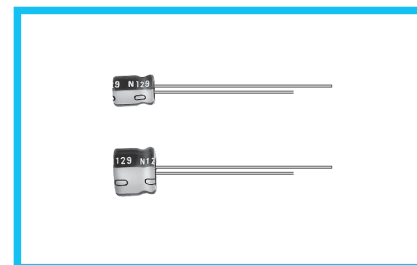# ALUMINUM ELECTROLYTIC CAPACITORS

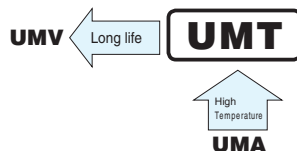# UMT
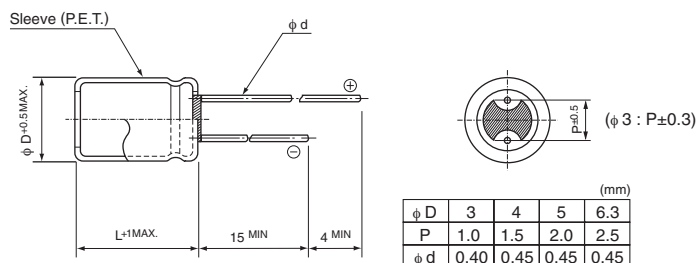
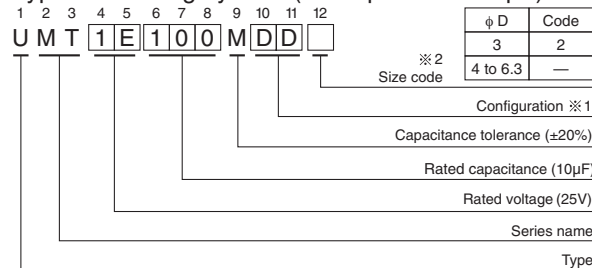5mmL, Wide Temperature Range

Anti-Solvent Feature

- Wide temperature range of −55 to +105°C, with 5mm height.
- Compliant to the RoHS directive (2011/65/EU).

UMV → Long life → **UMT**

↑ High Temperature
UMA

■Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +105°C
Voltage Range	4 to 50V
Rated Capacitance Range	1 to 100µF
Rated Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV or 3 (µA), whichever is greater.

Tangent of loss angle (tan δ)

Measurement frequency : 120Hz at 20°C

Rated voltage (V)	4	6.3	10	16	25	35	50	Figures in ( ) are for φ3 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 ZT / Z20 (MAX.)	Z−25°C / Z+20°C	6	3	3	2	2	2	2
	Z−40°C / Z+20°C	12	8	5	4	3	3	3

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 105°C.	Capacitance change	Within ±25% of the initial capacitance value (φ 3mm unit, and ≦ 16V) Within ±20% of the initial capacitance value (≧ 25V)
		tan δ	200% or less than the initial specified value
		Leakage current	Less than or equal to the initial specified value
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.		
Marking	Printed with white color letter on black sleeve.		

■Radial Lead Type

Sleeve (P.E.T.)

φ d

φ D +0.5 MAX.

L+1 MAX.   15 MIN   4 MIN

(φ 3 : P±0.3)
p±0.5

(mm)

φ D	3	4	5	6.3
P	1.0	1.5	2.0	2.5
φ d	0.40	0.45	0.45	0.45

• Please refer to page 20 about the end seal configuration.

Type numbering system (Example : 25V 10µF)

1 2 3 4 5 6 7 8 9 10 11 12

U M T 1 E 1 0 0 M D D

φ D	Code
3	2
4 to 6.3	—

※2 Size code

Configuration ※1

Capacitance tolerance (±20%)

Rated capacitance (10µF)

Rated voltage (25V)

Series name

Type

※1 Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
3	CD
4 to 6.3	DD

※2 For φ 3mm unit, place size code of [2] to 12th digit.

■Dimensions

Cap.(µF)	Code	V 4 0G		6.3 0J		10 1A		16 1C		25 1E		35 1V		50 1H	
1	010													● 4 × 5	6.2(5.9)
2.2	2R2											3 × 5	7.5	● 4 × 5	11 (9)
3.3	3R3											● 4 × 5	11 (9)	4 × 5	14
4.7	4R7									● 4 × 5	13 (10)	4 × 5	15	5 × 5	19
10	100							● 4 × 5	18 (14)	5 × 5	23	5 × 5	25	6.3 × 5	30
22	220	4 × 5	22	4 × 5	22	5 × 5	27	5 × 5	30	6.3 × 5	38	6.3 × 5	48		
33	330	5 × 5	30	5 × 5	30	5 × 5	35	6.3 × 5	40	6.3 × 5	48				
47	470	5 × 5	36	5 × 5	36	6.3 × 5	46	6.3 × 5	50					Case size φD × L (mm)	Rated ripple
100	101	6.3 × 5	60	6.3 × 5	60										

Size φ3 × 5 is available for capacitors marked "●"
Figures in ( ) are for φ 3 product.

Rated ripple current (mArms) at 105°C 120Hz

●Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.70	1.00	1.17	1.36	1.50

CAT.8100H

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Nichicon](#):

UMT0G101MDD   UMT0J470MDD   UMT1A220MDD   UMT1A330MDD   UMT1E220MDD   UMT1E330MDD
UMT0J220MDD   UMT0J330MDD   UMT0G470MDD   UMT0J101MDD   UMT1C100MDD   UMT1C220MDD
UMT1C330MDD   UMT0G220MDD   UMT0G330MDD   UMT1A470MDD   UMT1A470MDD1TE   UMT1C100MCD2
UMT1E4R7MCD2   UMT1E4R7MDD   UMT1H010MCD2   UMT1H3R3MDD   UMT1H4R7MDD   UMT1V2R2MCD2
UMT1V3R3MCD2   UMT1V3R3MDD   UMT1C470MDD   UMT1E100MDD   UMT1H100MDD   UMT1H2R2MCD2
UMT1H2R2MDD   UMT1V100MDD   UMT1V220MDD   UMT1H010MDD   UMT1H0R1MCD2   UMT1H0R1MDD
UMT1HR33MDD   UMT1HR47MCD2   UMT1HR47MDD   UMT1HR22MCD2   UMT1HR22MDD   UMT1HR33MCD2
UMT1V4R7MDD   UMT0J101MDD1TP   UMT1HR22MCD2TP   UMT0G101MDD1TP   UMT1H2R2MCD2TP
UMT1HR33MCD2TP   UMT1V3R3MCD2TP   UMT1H0R1MCD2TP   UMT0G330MDD1TP   UMT1A220MDD1TP
UMT1H010MCD2TP   UMT0J330MDD1TP   UMT1C220MDD1TP   UMT1V100MDD1TP   UMT1H100MDD1TP
UMT1E220MDD1TP   UMT1H4R7MDD1TP   UMT1E330MDD1TP   UMT0J220MDD1TP   UMT1C100MDD1TP
UMT1E4R7MCD2TP   UMT1E100MDD1TP   UMT1V220MDD1TP   UMT1H010MDD1TP   UMT1C330MDD1TP
UMT1V4R7MDD1TP   UMT1HR47MCD2TP   UMT1C100MCD2TP   UMT0G470MDD1TP   UMT1A330MDD1TP
UMT1A470MDD1TP   UMT1E4R7MDD1TP   UMT1C470MDD1TP   UMT1V2R2MCD2TP