ALUMINUM ELECTROLYTIC CAPACITORS

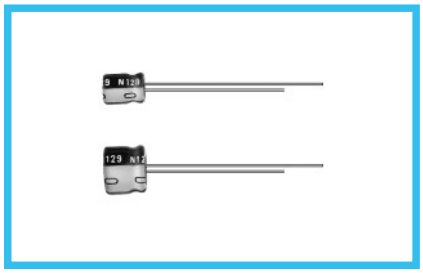
nichicon

MT 5mmL, Wide Temperature Range series

Anti-Solvent Feature

- Wide temperature range of –55 to +105°C, with 5mm height.
- Compliant to the RoHS directive (2002/95/EC).

MV Long life — MT — High Temperature MA



■Specifications

Item	Performance Characteristics
Category Temperature Range	–55 to +105°C
Voltage Range	4 to 50V
Rated Capacitance Range	0.1 to 100µF
Rated Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (µA), whichever is greater.
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz, Temperature : 20°C

Rated voltage (V)	4	6.3	10	16	25	35	50
tan δ (MAX.)	0.37	0.28	0.24	0.20	0.16	0.13 (0.14)	0.12 (0.14)

Figures in ( ) are for φ 3 product.

Stability at Low Temperature — Measurement frequency : 120Hz

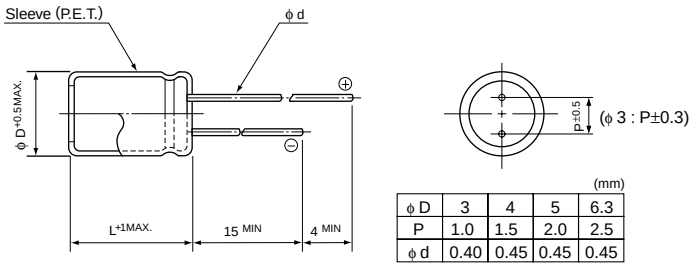
Rated voltage (V)		4	6.3	10	16	25	35	50
Impedance ratio ZT / Z20 (MAX.)	Z–25°C / Z+20°C	6	3	3	2	2	2	2
	Z–40°C / Z+20°C	12	8	5	4	3	3	3

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



(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 configulation.

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	

※2 Size code

φ D	Code
3	2
4 to 6.3	—

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

V	4		6.3		10		16		25		35		50	
Cap.(µF) Code	0G		0J		1A		1C		1E		1V		1H	
0.1	0R1												• 4×5	1.0
0.22	R22												• 4×5	2.6
0.33	R33												• 4×5	3.2
0.47	R47												• 4×5	3.8
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

Please refer to page 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.