ALUMINUM ELECTROLYTIC CAPACITORS

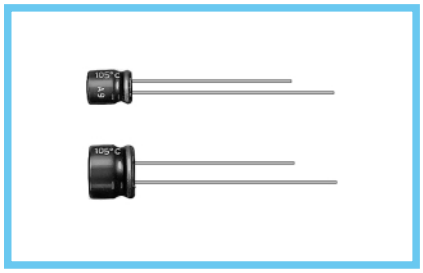
nichicon

MF 5mmL, Low Impedance series

Low Impedance Anti-Solvent Feature

- Low impedance over wide temperature range of –55 to +105°C, with 5mm height.
- Suited for DC-DC converters where smaller case size and lower impedance are required.
- Adapted to the RoHS directive (2002/95/EC).

MF Low Impedance MT



■Specifications

Item	Performance Characteristics
Category Temperature Range	–55 to +105°C
Rated Voltage Range	6.3 to 35V
Rated Capacitance Range	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.
tan δ	Measurement frequency : 120Hz, Temperature : 20°C

Rated voltage (V)	6.3	10	16	25	35
tan δ (MAX.)	0.22	0.20	0.18	0.14	0.12

Stability at Low Temperature — Measurement frequency : 120Hz

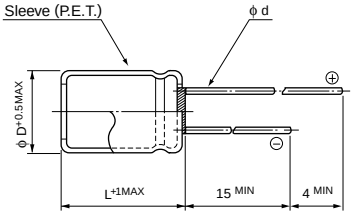
Rated voltage (V)		6.3	10	16	25	35
Impedance ratio ZT / Z20 (MAX.)	Z–25°C / Z+20°C	2	2	2	2	2
	Z–55°C /Z+20°C	4	4	3	3	3

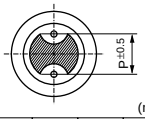
Endurance — After 1000 hours' application of rated voltage at 105°C capacitors meet the characteristic requirements listed at right.

Capacitance change	Within ±20% of initial value
tan δ	200% or less of initial specified value
Leakage current	Initial specified value or less

Item	Performance Characteristics
Shelf Life	After storig the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.
Marking	Printed with white color letter on dark brown sleeve.

■Radial Lead Type





(mm)

φ D	4	5	6.3
P	1.5	2.0	2.5
φ d	0.45	0.45	0.45

Type numbering system (Example : 25V 10µF)

1	2	3	4	5	6	7	8	9	10	11
U	M	F	1	E	1	0	0	M	D	D

Configuration ※
Capacitance tolerance (± 20%)
Rated capacitance (10µF)
Rated voltage (25V)
Series name
Type

※Configuration

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

■Dimensions

Cap.(µF) \ V	Code	6.3			10			16			25			35		
		0J			1A			1C			1E			1V		
1	010													4×5	5.0	50
1.5	1R5													4×5	5.0	50
2.2	2R2													4×5	5.0	50
3.3	3R3													4×5	5.0	50
4.7	4R7										4×5	5.0	50	4×5	5.0	50
6.8	6R8										4×5	5.0	50	5×5	2.6	80
10	100							4×5	5.0	50	5×5	2.6	80	5×5	2.6	80
15	150							5×5	2.6	80	6.3×5	1.3	115	6.3×5	1.3	115
22	220	4×5	5.0	50	5×5	2.6	80	5×5	2.6	80	6.3×5	1.3	115	6.3×5	1.3	115
33	330	5×5	2.6	80	5×5	2.6	80	6.3×5	1.3	115	6.3×5	1.3	115			
47	470	5×5	2.6	80	6.3×5	1.3	115	6.3×5	1.3	115						
68	680	6.3×5	1.3	115										Case size φD×L (mm)	Impedance	Rated ripple
100	101	6.3×5	1.3	115												

Max. Impedance (Ω) at 20°C 100kHz
Rated Ripple (mArms) at 105°C 100kHz

●Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.35	0.50	0.64	0.83	1.00

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