

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

nichicon

LF Radial Lead Type, Standard series



NEW

- Ultra Low ESR, High ripple current.
- Load life of 2000 hours at 105°C.
- Radial lead type :
Lead free flow soldering condition correspondence.
- Adapted to the RoHS directive (2002/95/EC).

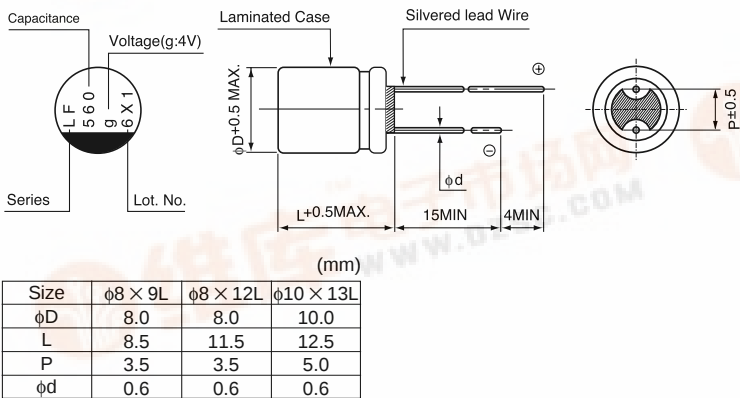


Specifications

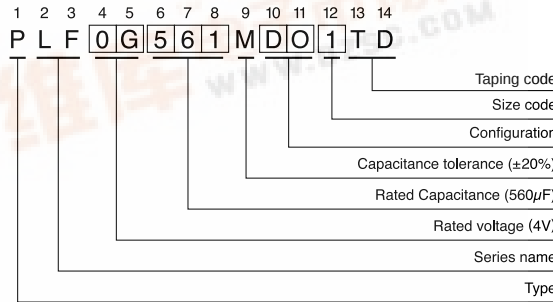
Item	Performance Characteristics									
Category Temperature Range	-55 ~ +105°C									
Rated Voltage Range	2.5 ~ 16V									
Rated Capacitance Range	270 ~ 1000μF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
tan δ	Not more than value of Standard ratings at 120Hz, 20°C									
ESR (※ 1)	Not more than value of Standard ratings at 100kHz, 20°C									
Leakage Current (※ 2)	Not more than value of Standard ratings. After 2 minute's application of rated voltage. 20°C									
Characteristics of Temperature Impedance Ratio	Z+105°C / Z+20°C ≤ 1.25 (100kHz) Z-55°C / Z+20°C ≤ 1.25									
Endurance	After 2000 hours' application of rated voltage at 105°C, capacitors meet the specified value for life characteristics listed at right.	<table><tr><td>Capacitance change</td><td>Within ± 20% of initial value (※ 3)</td></tr><tr><td>tan δ</td><td>150% or less of the initial specified value</td></tr><tr><td>ESR (※ 1)</td><td>150% or less of the initial specified value</td></tr><tr><td>Leakage current (※ 2)</td><td>Initial specified value or less</td></tr></table>	Capacitance change	Within ± 20% of initial value (※ 3)	tan δ	150% or less of the initial specified value	ESR (※ 1)	150% or less of the initial specified value	Leakage current (※ 2)	Initial specified value or less
Capacitance change	Within ± 20% of initial value (※ 3)									
tan δ	150% or less of the initial specified value									
ESR (※ 1)	150% or less of the initial specified value									
Leakage current (※ 2)	Initial specified value or less									
Damp Heat	After 1000 hours' application of rated voltage at 60°C 90%RH, capacitors meet the specified value for life characteristics listed at right.	<table><tr><td>Capacitance change</td><td>Within ± 20% of initial value (※ 3)</td></tr><tr><td>tan δ</td><td>150% or less of the initial specified value</td></tr><tr><td>ESR (※ 1)</td><td>150% or less of the initial specified value</td></tr><tr><td>Leakage current (※ 2)</td><td>Initial specified value or less</td></tr></table>	Capacitance change	Within ± 20% of initial value (※ 3)	tan δ	150% or less of the initial specified value	ESR (※ 1)	150% or less of the initial specified value	Leakage current (※ 2)	Initial specified value or less
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tan δ	150% or less of the initial specified value									
ESR (※ 1)	150% or less of the initial specified value									
Leakage current (※ 2)	Initial specified value or less									
Resistance to Soldering Heat	To comply with recommended conditions for reflow soldering. Pre-heating shall be done at 150 ~ 200°C and for 60 ~ 180 sec. Peak temp. is 265°C, within 10 sec. Measurement for solder temperature profile shall be made at a point on the terminal nearest where the terminals protrude through the soldering side of PC board.	<table><tr><td>Capacitance change</td><td>Within ± 10% of initial value (※ 3)</td></tr><tr><td>tan δ</td><td>130% or less of the initial specified value</td></tr><tr><td>ESR (※ 1)</td><td>130% or less of the initial specified value</td></tr><tr><td>Leakage current (※ 2)</td><td>Initial specified value or less</td></tr></table>	Capacitance change	Within ± 10% of initial value (※ 3)	tan δ	130% or less of the initial specified value	ESR (※ 1)	130% or less of the initial specified value	Leakage current (※ 2)	Initial specified value or less
Capacitance change	Within ± 10% of initial value (※ 3)									
tan δ	130% or less of the initial specified value									
ESR (※ 1)	130% or less of the initial specified value									
Leakage current (※ 2)	Initial specified value or less									
Marking	Navy blue print on the case top									

- ※ 1 ESR measurements should be made at a point on the terminal nearest the end seal of the capacitor.
※ 2 Conditioning : If there is doubt about the measured result, measurement should be made again after the rated voltage is applied for 120 minutes at the temperature of 105°C.
※ 3 Initial value : The value before test of examination of resistance to soldering.

Dimensions



Type numbering system (Example : 4V 560μF)



Voltage

V	2.5	4	6.3	10	16
Code	e	g	j	A	C

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■ Standard ratings

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (0.2CV)(μA)	ESR (mΩ) (at 100kHz 20°C)	Rated ripple (mArms)	Part Number
2.5 (0E)	560	8×9	0.08	280	6	4800	PLF0E561MCO1
	680	8×12	0.08	340	6	5700	PLF0E681MDO1
	820	▲ 8×9	0.08	410	7	5200	PLF0E821MCO6
	820	8×12	0.08	410	6	6200	PLF0E821MDO1
	1000	10×13	0.08	500	6	6500	PLF0E102MDO1
4 (0G)	560	▲ 8×9	0.08	448	7	5200	PLF0G561MCO6
	560	8×12	0.08	448	7	5500	PLF0G561MDO1
	680	8×12	0.08	544	6	6200	PLF0G681MDO1
	820	10×13	0.08	656	6	6500	PLF0G821MDO1
6.3 (0J)	470	▲ 8×9	0.08	592	7	5200	PLF0J471MCO6
	470	8×12	0.08	592	7	5500	PLF0J471MDO1
	680	10×13	0.08	857	6	6300	PLF0J681MDO1
10 (1A)	270	8×12	0.08	540	8	4900	PLF1A271MDO1
	470	10×13	0.08	940	7	5700	PLF1A471MDO1
16 (1C)	270	8×12	0.08	864	9	4800	PLF1C271MDO1
	470	10×13	0.08	1504	9	5000	PLF1C471MDO1

No marked, **[1]** will be put at 12th digit of type numbering system.

Rated Ripple (mArms) at 105°C 100kHz

▲ : In this case, **[6]** will be put at 12th digit of type numbering system.

- Taping specifications are given in page 24.
- Please refer to page 3 for the minimum order quantity.