



Sub-Miniature Radial Electrolytics

MLRL Series

FEATURES

- Ultraminiature and low profile size
- Low leakage current
- $\pm 20\%$ tolerance standard, $\pm 10\%$ tolerance available
- Can be replacement for tantalum
- Satisfies characteristic W of JIS-C-5141 standard
- RoHS Compliant



RoHS Compliant

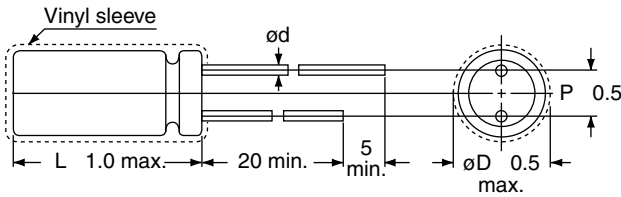
CHARACTERISTICS

Item	Characteristics							
Operating Temperature Range	-40°C ~ +85°C							
Capacitance Tolerance	$\pm 20\%$ at +20°C, 120Hz							
Leakage Current	I = 0.01CWV or 3 μ A whichever is greater after 2 minutes of applied rated DC working voltage at 20°C Where: C = rated capacitance in μ F; WV = rated DC working voltage							
Dissipation Factor (Tan δ , at +20°C 120Hz)	Working voltage (WV)	6.3	10	16	25	35	50	63
	Tan δ	0.23	0.20	0.16	0.14	0.12	0.10	0.10
Surge Voltage	Working voltage (WV)	6.3	10	16	25	35	50	63
	Surge voltage (SV)	8	13	20	32	44	63	79
Low Temperature Characteristics	Working voltage (WV)	6.3	10	16	25	35	50	63
	Imp. ratio	Z-25°C/Z+20°C	4	3	3	2	2	2
	@ 120Hz	Z-40°C/Z+20°C	10	8	6	4	4	4
Life Test	When returned to +20°C after 1,000 hours application of working voltage at +85°C, the capacitor will meet the following limits: Capacitance change is $\leq \pm 20\%$ of initial value; tan δ is $\leq 200\%$ of initial specified value; leakage current is initial specified value							
Shelf Test	When returned to +20°C after 1,000 hours at +85°C with no voltage applied, the capacitor will meet the following limits: Capacitance change is $\leq \pm 20\%$ of initial value; tan δ is $\leq 200\%$ of initial specified value; leakage current is $\leq 200\%$ of initial specified value							

PART NUMBERING SYSTEM

1	4	0	-	M	L	R	L	1	0	V	1	0	0	-	R	C
Prefix				Series				Voltage Actual Value			Capacitance (μ F) Actual Value				Suffix (RoHS Compliant)	

DIMENSIONS AND PERMISSIBLE RIPPLE CURRENT



Lead Spacing and Diameter (mm)

øD	4	5	6	8
P	1.5	2.0	2.5	3.5
ød	0.45	0.50	0.50	0.50

Value (μ F)	Working Voltage (WV); Dimensions: D x H (mm); Ripple Current: mA/RMS @ 120Hz, 85°C											
	6.3		10		16		25		35		50	
	D x H	mA	D x H	mA	D x H	mA	D x H	mA	D x H	mA	D x H	mA
0.1											4 x 7	2
0.22											4 x 7	3
0.33											4 x 7	4
0.47											4 x 7	5
1											4 x 7	10
2.2											4 x 7	15
3.3											4 x 7	18
4.7									4 x 7	22	4 x 7	23
10					4 x 7	25	4 x 7	26	5 x 7	30	6.3 x 7	34
22			4 x 7	32	4 x 7	39	5 x 7	41	6.3 x 7	47		
33	4 x 7	32	4 x 7	35	5 x 7	43	6.3 x 7	71				
47	4 x 7	38	5 x 7	47	6.3 x 7	59	6 x 7	83				
100	5 x 7	58	6.3 x 7	80	6.3 x 7	90						
220	6 x 7	99	8 x 7	140								

Mouser Electronics

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