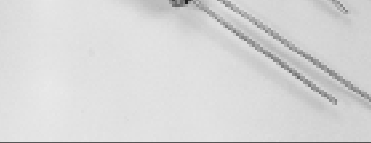


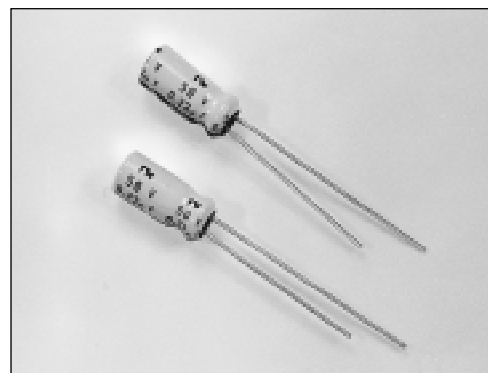
LOW LEAKAGE CURRENT AND LONG LIFE ALUMINUM ELECTROLYTIC CAPACITORS, POLARIZED, RADIAL LEADS

FEATURES

- LOW LEAKAGE CURRENT & LOW NOISE
- CLOSE TOLERANCE AVAILABLE ($\pm 10\% = K$)
- NEW REDUCED SIZES (Alternate Sizes on Request)

CHARACTERISTICS

Rated Working Voltage Range	10 ~ 50Vdc					
Rated Capacitance Range	0.1 ~ 2200μF					
Operating Temperature Range	-40°C~+85°					
Capacitance Tolerance	±20% (M), ±10% (K)					
Max. Leakage Current After 2 minutes At 20°C	0.002CV or 0.4μA Whichever is greater					
Surge Voltage & Dissipation Factor (Tan δ)	W.V. (Vdc)	10	16	25	35	50
	S.V. (Vdc)	13	20	32	44	63
	Tan δ @ 120Hz	0.16	0.13	0.12	0.10	0.08
Low Temperature Stability (Impedance Ratio @ 120Hz)	W.V. (Vdc)	10	16	25	35	50
	Z-20°C/Z+20°C	2	1.5	1.5	1.5	1.5
	Z-40°C/Z+20°C	5	4	3	3	3
Life Test @ 85°C 2,000 Hours for 5-10φmm size 4,000 Hours for 12.5φmm & over	Capacitance Change	Within ±20% of initial value				
	Dissipation Factor	Less than 200% of specified maximum value				
	Leakage Current	Less than specified maximum value				



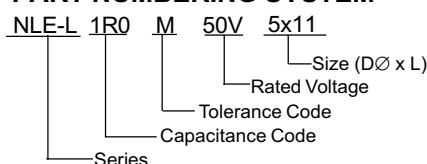
MAXIMUM PERMISSIBLE RIPPLE CURRENT (mA rms) AT 120Hz AND 85°C

Cap (μ F)	Working Voltage (Vdc)				
	10	16	25	35	50
0.1					1.5
0.22					2.5
0.33					3.5
0.47					5.0
1.0					11
2.2					23
3.3					40
4.7			45	45	45
10		65	65	70	70
22		85	100	110	110
33		100	140	140	170
47	110	140	170	190	200
100	180	230	280	300	350
220	300	350	400	450	500
330	400	450	500	550	600
470	500	550	650	700	800
1000	800	900	1000	1100	
2200	1200	1300			

MAXIMUM ESR (Ω) AT 20°C AND 120Hz

Cap (μ F)	Working Voltage (Vdc)				
	10	16	25	35	50
0.1					1326
0.22					603
0.33					402
0.47					282
1.0					133
2.2					60.3
3.3					40.2
4.7			26.2	28.2	28.2
10		19.9	13.3	13.3	13.3
22		9.05	6.03	6.03	6.03
33		6.03	4.02	4.02	4.02
47	5.29	4.23	2.82	2.82	2.82
100	2.49	1.99	1.33	1.33	1.33
220	1.13	0.91	0.61	0.61	0.61
330	0.76	0.61	0.41	0.41	0.41
470	0.53	0.43	0.29	0.29	0.29
1000	0.25	0.20	0.14	0.14	
2200	0.12	0.09			

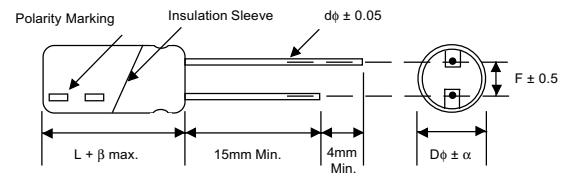
PART NUMBERING SYSTEM



LEAD SPACING AND DIAMETER (mm)

Case Dia. (D ϕ)	5	6.3	8	10	12.5	16	18	22
Leads Dia. (d ϕ)	0.5	0.5	0.6	0.6	0.6	0.8	0.8	0.8
Lead Spacing (F)	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10
Dim. α	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0

DIMENSIONS (mm)



SLEEVE COLOR: ORANGE

STANDARD PRODUCTS AND CASE SIZE TABLE D ϕ x L (mm)

Cap (μ F)	Code	Working Voltage (Vdc)				
		10	16	25	35	50
0.1	R10					5 x 11
0.22	R22					5 x 11
0.33	R33					5 x 11
0.47	R47					5 x 11
1.0	1R0					5 x 11
2.2	2R2					5 x 11
3.3	3R3					5 x 11
4.7	4R7			5 x 11	5 x 11	5 x 11
10	100		5 x 11	5 x 11	5 x 11	5 x 11
22	220		5 x 11	5 x 11	6.3 x 11	6.3 x 11
33	330		5 x 11	6.3 x 11	6.3 x 11	8 x 11.5
47	470	5 x 11	6.3 x 11	6.3 x 11	8 x 11.5	8 x 11.5
100	101	6.3 x 11	8 x 11.5	8 x 11.5	10 x 12.5	10 x 16
220	221	8 x 11.5	10 x 12.5	10 x 16	10 x 20	12.5 x 20
330	331	10 x 12.5	10 x 16	10 x 20	12.5 x 20	12.5 x 25
470	471	10 x 16	10 x 16	12.5 x 20	12.5 x 25	16 x 25
1000	102	12.5 x 20	12.5 x 20	16 x 25	16 x 25	
2200	222	16 x 25	16 x 25			