

Miniature Aluminum Electrolytic Capacitors

NRE-S Series

SUBMINIATURE, RADIAL LEADS, POLARIZED

FEATURES

- LOW PROFILE, 7mm HEIGHT
- STABLE & HIGH PERFORMANCE

CHARACTERISTICS

Rated Voltage Range		6.3 ~ 63 VDC							
Capacitance Range		0.1 ~ 220μF							
Operating Temperature Range		-40 ~ +85°C							
Capacitance Tolerance		± 20% (M)							
Max. Leakage Current @ (20°C)	After 2 min.	0.01CV or 3μA , whichever is greater							
Max. Tan δ @ 120Hz/20°C		W.V. (Vdc)	6.3	10	16	25	35	50	63
		S.V. (Vdc)	8	13	20	32	44	63	79
		Tan δ	0.24	0.20	0.16	0.14	0.12	0.10	0.08
Low Temperature Stability Impedance Ratio @ 120Hz		Z-25°C/Z+20°C	4	3	2	2	2	2	2
		Z-40°C/Z+20°C	10	8	6	4	4	4	4
Load Life Test at Rated W.V. 85°C 1,000 Hours		Capacitance Change	Within ±25% of initial measured value						
		Tan δ	Less than 200% of specified maximum value						
		Leakage Current	Less than specified maximum value						



LEADED

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

Cap (μF)	Working Voltage (Vdc)						
	6.3	10	16	25	35	50	63
0.1						1.0	1.2
0.22						2.2	2.9
0.33						3.2	4.4
0.47						5.0	5.0
1.0						9	10
2.2						15	17
3.3						18	21
4.7				19	20	23	26
10			25	27	29	34	43
22	29	35	39	43	47	55	65
33	38	43	49	53	60	70	
47	46	53	59	70	75	80	
100	70	80	120	100	105		
220	95	110	110				
330	110						

MAXIMUM E.S.R. (Ω) at 120Hz AND 20°C

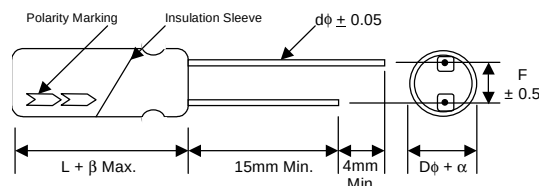
Cap (μF)	Working Voltage (Vdc)						
	6.3	10	16	25	35	50	63
0.1						1680	1320
0.22						754	604
0.33						503	404
0.47						353	283
1.0						188	133
2.2						75.4	60.4
3.3						50.3	40.4
4.7				49.5	42.4	35.3	26.3
10			26.6	23.3	19.9	16.6	6.04
22	18.1	15.1	12.1	10.6	9.05	7.54	4.04
33	12.1	10.1	8.05	7.04	6.03	4.80	
47	8.47	7.06	5.65	4.85	4.24	3.53	
100	3.98	3.32	2.88	2.33	1.90		
220	2.49	1.51	1.21				
330	2.21						

LEAD SPACING AND DIAMETER (mm)

Case Dia. (D Ø)	4	5	6.3
Leads Dia. (d Ø)	0.45	0.45	0.45
Lead Spacing (F)	1.5	2.0	2.5
Dim. α	0.5	0.5	0.5
Dim. β	1.0	1.0	1.0

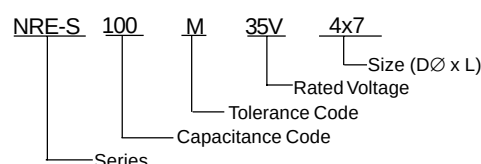
STANDARD PRODUCT AND CASE SIZE Table D φ x L (mm)

Cap (μF)	Code	Working Voltage (Vdc)						
		6.3	10	16	25	35	50	63
0.1	R10						4 x 7	4 x 7
0.22	R22						4 x 7	4 x 7
0.33	R33						4 x 7	4 x 7
0.47	R47						4 x 7	4 x 7
1.0	1R0						4 x 7	4 x 7
2.2	2R2						4 x 7	4 x 7
3.3	3R3						4 x 7	4 x 7
4.7	4R7					4 x 7	4 x 7	5 x 7
10	100			4 x 7	4 x 7	4 x 7	5 x 7	6.3 x 7
22	220	4 x 7	4 x 7	4 x 7	5 x 7	5 x 7	6.3 x 7	6.3 x 7
33	330	4 x 7	4 x 7	5 x 7	5 x 7	6.3 x 7	6.3 x 7	
47	470	4 x 7	5 x 7	5 x 7	6.3 x 7	6.3 x 7	6.3 x 7	
100	101	5 x 7	6.3 x 7	6.3 x 7	6.3 x 7	6.3 x 7		
220	221	6.3 x 7	6.3 x 7	6.3 x 7				
330	331	6.3 x 7						



SLEEVE COLOR: DARK BLUE

PART NUMBERING SYSTEM



See page 8 for complete part numbering system.



NIC COMPONENTS CORPORATION

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