

Non-Polar Aluminum Electrolytic Capacitors

NRE-SN Series

LOW PROFILE, SUB-MINIATURE, RADIAL LEADS,
NON-POLAR ALUMINUM ELECTROLYTIC

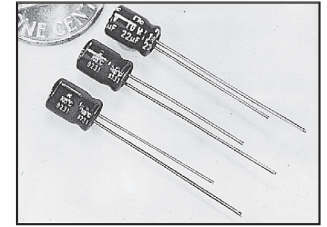
FEATURES

- BI-POLAR
- 7mm HEIGHT / LOW PROFILE

RoHS Compliant

includes all homogeneous materials

*See Part Number System for Details



CHARACTERISTICS

Rated Voltage Range	6.3 ~ 50Vdc						
Capacitance Range	0.1 ~ 47μF						
Operating Temperature Range	-40 ~ +85°C						
Capacitance Tolerance	±20%(M)						
Max. Leakage Current After 1 minutes At +20°C	0.05CV or 10μA whichever is greater						
Surge Voltage & Max. Tan δ @ 120Hz/+20°C	W.V. (Vdc)	6.3	10	16	25	35	50
	S.V. (Vdc)	8	13	20	32	44	63
	Tan δ	0.24	0.20	0.16	0.16	0.14	0.12
Low Temperature Stability (Impedance Ratio @ 120Hz)	Z-25°C/Z+20°C	4	3	2	2	2	2
	Z-40°C/Z+20°C	8	6	4	4	3	3
Load Life Test at Rated W.V. +85°C 1,000 Hours (Polarity Shall Be Reversed Every 250 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					

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

Cap. (μF)	Working Voltage (Vdc)					
	6.3	10	16	25	35	50
0.1	-	-	-	-	-	1.0
0.22	-	-	-	-	-	2.5
0.33	-	-	-	-	-	3.5
0.47	-	-	-	-	-	5.0
1.0	-	-	-	-	-	10
2.2	-	-	-	-	10	14
3.3	-	-	-	18	16	20
4.7	-	-	-	20	22	27
10	-	24	30	35	37	-
22	-	40	51	53	-	-
33	42	56	63	-	-	-
47	55	67	68	-	-	-

MAXIMUM ESR (Ω AT 120Hz AND 20°C)

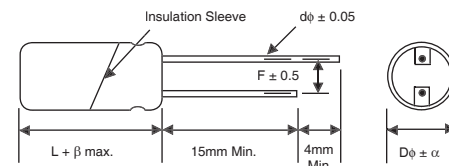
Cap. (μF)	Working Voltage (Vdc)					
	6.3	10	16	25	35	50
0.1	-	-	-	-	-	1990
0.22	-	-	-	-	-	905
0.33	-	-	-	-	-	604
0.47	-	-	-	-	-	424
1.0	-	-	-	-	-	199
2.2	-	-	-	-	105.6	90.5
3.3	-	-	-	80.4	70.4	60.4
4.7	-	-	-	56.5	49.4	42.4
10	-	33.2	26.6	26.6	23.2	-
22	-	15.1	9.09	9.09	-	-
33	12.1	10.1	8.05	-	-	-
47	8.47	7.06	5.65	-	-	-

STANDARD PRODUCTS AND CASE SIZE TABLE Dφ x L (mm)

Cap. (μF)	Code	Working Voltage (Vdc)					
		6.3	10	16	25	35	50
0.1	R10	-	-	-	-	-	4x7
0.22	R22	-	-	-	-	-	4x7
0.33	R33	-	-	-	-	-	4x7
0.47	R47	-	-	-	-	-	4x7
1.0	1R0	-	-	-	-	-	4x7
2.2	2R2	-	-	-	-	4x7	5x7
3.3	3R3	-	-	-	4x7	5x7	5x7
4.7	4R7	-	-	-	4x7	5x7	6.3x7
10	100	-	4x7	4x7	5x7	6.3x7	-
22	220	5x7	5x7	6.3x7	6.3x7	-	-
33	330	5x7	6.3x7	6.3x7	-	-	-
47	470	6.3x7	6.3x7	6.3x7	-	-	-

LEAD SPACING AND DIAMETER (mm)

Case Dia. (Dφ)	4	5	6.3
Lead Dia. (dφ)	0.45	0.45	0.45
Lead Space (F)	1.5	2.0	2.5



PART NUMBER SYSTEM

NRE-SN 101 M 25V 8X11 F

Series Capacitance Code: First 2 characters significant, third character is multiplier

Tolerance Code (M=20%)

Working Voltage (Vdc)

Case Size (Dφ x L)

RoHS Compliant

PRECAUTIONS

Please review the notes on correct use, safety and precautions found on pages T10 & T11 of NIC's Electrolytic Capacitor catalog.
Also found at www.niccomp.com/precautions
If in doubt or uncertainty, please review your specific application - process details with NIC's technical support personnel: tpmg@niccomp.com

