

Non-Polar Aluminum Electrolytic Capacitors

NRE-SN Series

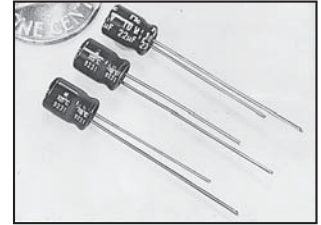
LOW PROFILE, SUB-MINIATURE, RADIAL LEADS,
NON-POLAR ALUMINUM ELECTROLYTIC

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	1.0 ~ 47 μ F						
Operating Temperature Range	-40 ~ +85°C						
Capacitance Tolerance	$\pm 20\%$ (M)						
Max. Leakage Current After 1 minutes At +20°C	0.05CV or 10 μ A 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 $\pm 25\%$ of initial measured value					
	Tan δ	Less than 200% of specified maximum value					
	Leakage Current	Less than specified maximum value					

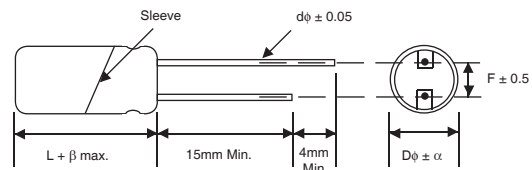
STANDARD PRODUCTS AND CASE SIZE TABLE D ϕ x L (mm)

Cap. (μ F)	Code	Working Voltage (Vdc)					
		6.3	10	16	25	35	50
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. (D ϕ)	4	5	6.3
Lead Dia. (d ϕ)	0.45	0.45	0.45
Lead Space (F)	1.5	2.0	2.5

DIMENSIONS (mm)



Drawing is representative of parts as supplied in bulk or straight lead format, please see taping specification for details on taped format packaging.

PART NUMBER SYSTEM

NRE-SN 3R3 M 50V 5X7 TB F

Series Capacitance Code: First 2 characters significant, third character is multiplier Tolerance Code (M=20%) Working Voltage (Vdc) Case Size (D ϕ x L) TB = Tape & Box* RoHS Compliant

*see taping specifications for details

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



STANDARD PRODUCT, SPECIFICATIONS AND CASE SIZES D ϕ x L (mm)

Part Number	Cap. (μ F)	W.V. (Vdc)	Dissipation Factor +20°C/120Hz	Ripple Current Rating (mA) +85°C/120Hz	Max. ESR (Ω) +20°C/120Hz	Load Life Hours @ +85°C
NRE-SN330M6.3V5x7F	33	6.3	0.24	42	12.1	1,000
NRE-SN470M6.3V6.3x7F	47		0.24	55	8.47	1,000
NRE-SN100M10V4x7F	10	10	0.20	24	33.2	1,000
NRE-SN220M10V5x7F	22		0.20	40	15.1	1,000
NRE-SN330M10V6.3x7F	33		0.20	56	10.1	1,000
NRE-SN470M10V6.3x7F	47		0.20	67	7.06	1,000
NRE-SN100M16V4x7F	10	16	0.16	30	26.6	1,000
NRE-SN220M16V6.3x7F	22		0.16	51	9.09	1,000
NRE-SN330M16V6.3x7F	33		0.16	63	8.05	1,000
NRE-SN470M16V6.3x7F	47		0.16	68	5.65	1,000
NRE-SN3R3M25V4x7F	3.3	25	0.16	18	80.4	1,000
NRE-SN4R7M25V4x7F	4.7		0.16	20	56.5	1,000
NRE-SN100M25V5x7F	10		0.16	35	26.6	1,000
NRE-SN220M25V6.3x7F	22		0.16	53	9.09	1,000
NRE-SN2R2M35V4x7F	2.2	35	0.14	10	105.6	1,000
NRE-SN3R3M35V5x7F	3.3		0.14	16	70.4	1,000
NRE-SN4R7M35V5x7F	4.7		0.14	22	49.4	1,000
NRE-SN100M35V6.3x7F	10		0.14	37	23.2	1,000
NRE-SN1R0M50V4x7F	1.0	50	0.12	10	199	1,000
NRE-SN2R2M50V5x7F	2.2		0.12	14	90.5	1,000
NRE-SN3R3M50V5x7F	3.3		0.12	20	60.4	1,000
NRE-SN4R7M50V6.3x7F	4.7		0.12	27	42.4	1,000