

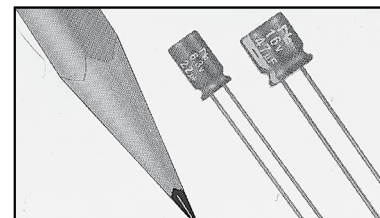
LOW IMPEDANCE, SUBMINIATURE, RADIAL LEADS,
POLARIZED ALUMINUM ELECTROLYTIC CAPACITORS

FEATURES

- VERY LOW IMPEDANCE AT HIGH FREQUENCY
- LOW PROFILE 7mm HEIGHT
- WIDE TEMPERATURE, -55°C ~ +105°C

RoHS
Compliant
includes all homogeneous materials

*See Part Number System for Details



CHARACTERISTICS

Rated Voltage Range	6.3 ~ 35Vdc					
Capacitance Range	0.47 ~ 330μF					
Operating Temperature Range	-55 ~ +105°C					
Capacitance Tolerance	±20%(M)					
Max. Leakage Current After 1 minutes At +20°C	0.01CV or 3μA, whichever is greater					
Max. Tan δ @ 120Hz/+20°C	W.V. (Vdc)	6.3	10	16	25	35
	S.V. (Vdc)	8	13	20	32	44
	Tan δ	0.24	0.20	0.18	0.14	0.12
Low Temperature Stability Impedance Ratio @ 120Hz	Z-40°C/Z+20°C	3	2	2	2	2
	Z-55°C/Z+20°C	5	4	4	3	3
Load Life Test at Rated W.V. +105°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				

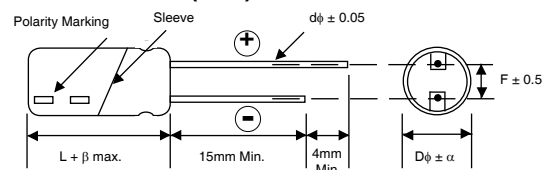
STANDARD PRODUCT AND CASE SIZE TABLE Dφ x L (mm)

Cap. (μF)	Code	Working Voltage (Vdc)				
		6.3	10	16	25	35
4.7	4R7	-	-	-	-	4x7
10	100	-	-	-	4x7	5x7
15	150	-	-	4x7	5x7	6.3x7
22	220	-	4x7	5x7	5x7	6.3x7
33	330	-	5x7	-	6.3x7	6.3x7
47	470	5x7	5x7	6.3x7	6.3x7	6.3x7
68	680	-	-	-	6.3x7	-
100	101	-	6.3x7	6.3x7	6.3x7	-
150	151	-	6.3x7	6.3x7	-	-
220	221	6.3x7	6.3x7	6.3x7	-	-
330	331	6.3x7	-	-	-	-

LEAD SPACING AND DIAMETER (mm)

Case Dia. (Dφ)	4	5	6.3
Lead Dia. (dφ)	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

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.

PRECAUTIONS

Please review the notes on correct use, safety and precautions 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



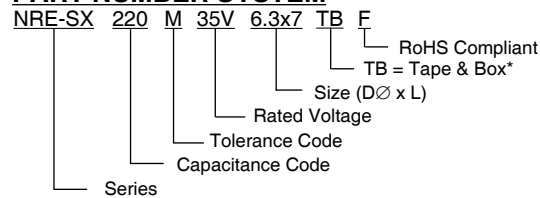
STANDARD PRODUCTS, CASE SIZES AND SPECIFICATIONS D ϕ x L (mm)

Part Number	Cap. (μF)	W.V. (Vdc)	Max. Tanδ	Max. Impedance 100KHz/20°C	Max. Ripple Current at 100KHz/105°C (mA rms)	Load Life Hours @ +105°C
NRE-SX470M6.3V5 x 7F	47	6.3	0.24	0.49	0.49	1000
NRE-SX221M6.3V6.3 x 7F	220		0.24	0.24	0.24	1000
NRE-SX331M6.3V6.3 x 7F	330		0.24	0.29	0.29	1000
NRE-SX220M10V4 x 7F	22	10	0.20	1.15	90	1000
NRE-SX330M10V5 x 7F	33		0.20	0.49	160	1000
NRE-SX470M10V5 x 7F	47		0.20	0.49	160	1000
NRE-SX101M10V6.3 x 7F	100		0.20	0.24	280	1000
NRE-SX151M10V6.3 x 7F	150		0.20	0.24	280	1000
NRE-SX221M10V6.3 x 7F	220		0.20	0.29	280	1000
NRE-SX150M16V4 x 7F	15	16	0.18	1.15	90	1000
NRE-SX220M16V5 x 7F	22		0.18	0.49	160	1000
NRE-SX470M16V6.3 x 7F	47		0.18	0.24	280	1000
NRE-SX101M16V6.3 x 7F	100		0.18	0.24	280	1000
NRE-SX151M16V6.3 x 7F	150		0.18	0.29	280	1000
NRE-SX221M16V6.3 x 7F	220		0.18	0.29	280	1000
NRE-SX100M25V4 x 7F	10	25	0.14	1.15	90	1000
NRE-SX150M25V5 x 7F	15		0.14	0.49	160	1000
NRE-SX220M25V5 x 7F	22		0.14	0.49	160	1000
NRE-SX330M25V6.3 x 7F	33		0.14	0.24	280	1000
NRE-SX470M25V6.3 x 7F	47		0.14	0.24	280	1000
NRE-SX680M25V6.3 x 7F	68		0.14	0.24	280	1000
NRE-SX101M25V6.3 x 7F	100		0.14	0.24	280	1000
NRE-SX4R7M35V4 x 7F	4.7	35	0.12	1.15	90	1000
NRE-SX100M35V5 x 7F	10		0.12	0.49	160	1000
NRE-SX150M35V6.3 x 7F	15		0.12	0.29	280	1000
NRE-SX220M35V6.3 x 7F	22		0.12	0.29	280	1000
NRE-SX330M35V6.3 x 7F	33		0.12	0.29	280	1000
NRE-SX470M35V6.3 x 7F	47		0.12	0.29	280	1000

RIPPLE CURRENT FREQUENCY CORRECTION FACTORS

Capacitance (μF)	Frequency			
	100Hz ≤ F < 1KHz	1KHz ≤ F < 10KHz	10KHz ≤ F < 100KHz	100KHz ≤ F
C ≤ 47	0.40	0.80	0.90	1.00
47 < C ≤ 100	0.60	0.80	0.95	1.00
100 < C	0.75	0.85	0.95	1.00

PART NUMBER SYSTEM



*see tape specification for details