

SUPER-MINIATURE, RADIAL LEADS, POLARIZED

FEATURES

- HIGH PERFORMANCE IN LOW PROFILE (7mm) HEIGHT
- GOOD 100KHz PERFORMANCE CHARACTERISTICS
- WIDE TEMPERATURE -55 TO + 105°C

RoHS Compliant

includes all homogeneous materials

*See Part Number System for Details



CHARACTERISTICS

Rated Working Voltage Range	6.3 ~ 50Vdc						
Capacitance Range	0.1 ~ 330μF						
Operating Temperature Range	-55°C~+105°C						
Capacitance Tolerance	±20% (M)						
Max. Leakage Current After 1 minutes At 20°C	0.01CV or 3μA Whichever is greater						
Surge Voltage & Dissipation Factor (Tan δ)	W.V. (Vdc)	6.3	10	16	25	35	50
	S.V. (Vdc)	8	13	20	32	44	63
	Tan δ @ 120Hz	0.24	0.21	0.18	0.14	0.12	0.10
Low Temperature Stability (Impedance Ratio @ 120Hz)	W.V. (Vdc)	6.3	10	16	25	35	50
	Z-40°C/Z+20°C	4	3	2	2	2	2
	Z-55°C/Z+20°C	6	5	4	3	3	3
Life Test @ +105°C 1,000 hours	Capacitance Change	Within ±25% of initial value					
	Dissipation Factor	Less than 200% of specified maximum value					
	Leakage Current	Less than specified maximum value					

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

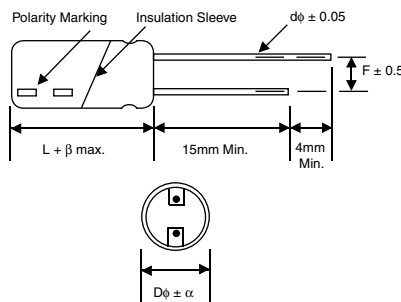
Cap(μF)	Code	Working Voltage (Vdc)					
		6.3	10	16	25	35	50
0.1	R10	-	-	-	-	-	4 x 7
0.22	R22	-	-	-	-	-	4 x 7
0.33	R33	-	-	-	-	-	4 x 7
0.47	R47	-	-	-	-	-	4 x 7
1.0	1R0	-	-	-	-	-	4 x 7
2.2	2R2	-	-	-	-	-	4 x 7
3.3	3R3	-	-	-	-	-	4 x 7
4.7	4R7	-	-	-	4 x 7	4 x 7	5 x 7
10	100	-	-	4 x 7	5 x 7	5 x 7	6.3 x 7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

MAX. RIPPLE CURRENT (mA rms 100KHz & 105°C)

Cap(μF)	Working Voltage (Vdc)					
	6.3	10	16	25	35	50
0.1	-	-	-	-	-	10
0.22	-	-	-	-	-	10
0.33	-	-	-	-	-	15
0.47	-	-	-	-	-	20
1.0	-	-	-	-	-	30
2.2	-	-	-	-	-	35
3.3	-	-	-	-	-	40
4.7	-	-	-	50	40	70
10	-	-	50	85	70	100
22	50	85	85	120	100	100
33	85	85	120	120	100	100
47	85	120	120	120	100	100
100	120	120	120	120	100	-
220	120	120	120	-	-	-
330	120	-	-	-	-	-

MAXIMUM E.S.R. (Ω) AT 20°C/100 KHz

Cap (μF)	Working Voltage					
	6.3	10	16	25	35	50
0.1	-	-	-	-	-	30.0
0.22	-	-	-	-	-	16.0
0.33	-	-	-	-	-	13.0
0.47	-	-	-	-	-	12.0
1.0	-	-	-	-	-	10.0
2.2	-	-	-	-	-	7.8
3.3	-	-	-	-	-	6.2
4.7	-	-	-	4.2	6.0	3.1
10	-	-	4.2	2.0	3.1	1.6
22	4.2	4.2	2.0	1.2	1.6	1.6
33	2.0	2.0	1.2	1.2	1.6	1.6
47	2.0	1.2	1.2	1.2	1.6	1.6
100	1.2	1.2	1.2	1.5	1.6	-
220	1.2	1.2	1.2	-	-	-
330	1.2	-	-	-	-	-



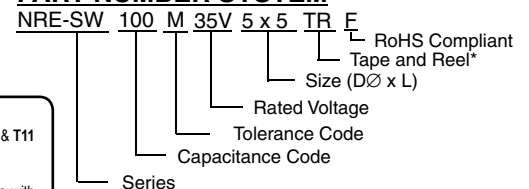
RIPPLE CURRENT CORRECTION FACTORS

Frequency (Hz)	120	1K	10K	100K
	4 x 7mm	0.50	0.70	0.93
5 x 7mm	0.60	0.80	0.93	1.00
6.3 x 7mm	0.70	0.85	0.93	1.00

LEAD SPACING & DIAMETER (mm)

Case Dia. (Dφ)	4	5	6.3
Leads 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

PART NUMBER SYSTEM



*see tape specification 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

