

Non-Polar Aluminum Electrolytic Capacitors

NSRN Series

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

FEATURES

- BI-POLAR
- 5mm HEIGHT / LOW PROFILE

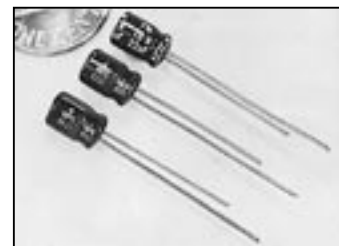
CHARACTERISTICS

Rated Voltage Range	6.3 ~ 50Vdc						
Rated Capacitance Range	0.1 ~ 47 μ F						
Operating Temperature Range	-40~+85°C						
Max. Leakage Current After 1 minute At 20°C	0.03CV + 6 μ A, whichever is greater						
Surge Voltage & Max. Tan δ	W.V. (Vdc)	6.3	10	16	25	35	50
	S.V. (Vdc)	8	13	20	32	44	63
	Tan δ at 120Hz/20°C	0.24	0.22	0.20	0.20	0.20	0.18
Low Temperature Stability (Impedance Ratio At 120Hz)	W.V. (Vdc)	6.3	10	16	25	35	50
	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 85°C 1,000 Hours (reversing polarity every 250 hours)	Capacitance Change	Within \pm 25% of initial measured value					
	Tan δ	Less than 200% of specified value					
	Leakage Current	Less than specified value					

RoHS Compliant

includes all homogeneous materials

*See Part Number System for Details



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

Cap. (μ F)	Working Voltage (Vdc)					
	6.3	10	16	25	35	50
0.1	-	-	-	-	-	1.0
0.22	-	-	-	-	-	2.0
0.33	-	-	-	-	-	2.8
0.47	-	-	-	-	-	4.0
1.0	-	-	-	-	-	8.4
2.2	-	-	-	-	8.4	13
3.3	-	-	-	12	16	17
4.7	-	-	12	16	18	20
10	-	17	23	27	29	-
22	28	33	37	-	-	-
33	37	41	49	-	-	-
47	45	-	-	-	-	-

MAXIMUM E.S.R. (Ω AT 120Hz AND 20°C)

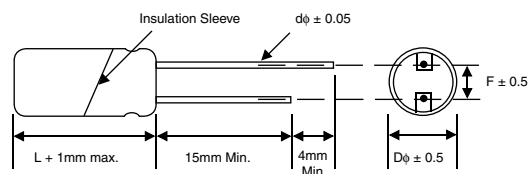
Cap (μ F)	Working Voltage (Vdc)					
	6.3	10	16	25	35	50
0.1	-	-	-	-	-	2490
0.22	-	-	-	-	-	1132
0.33	-	-	-	-	-	755
0.47	-	-	-	-	-	530
1.0	-	-	-	-	-	249
2.2	-	-	-	-	113	113
3.3	-	-	-	85.5	75.5	75.5
4.7	-	-	60.0	60.0	53.0	53.0
10	-	33.2	28.2	28.2	24.9	-
22	18.1	15.1	12.8	-	-	-
33	12.1	10.1	8.05	-	-	-
47	8.47	-	-	-	-	-

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

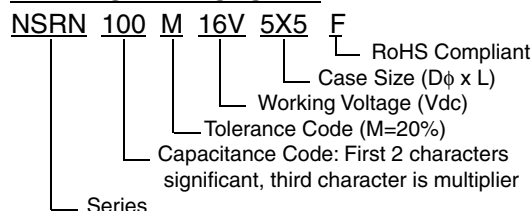
Cap. (μ F)	Code	Working Voltage (Vdc)					
		6.3	10	16	25	35	50
0.1	R10	-	-	-	-	-	4x5
0.22	R22	-	-	-	-	-	4x5
0.33	R33	-	-	-	-	-	4x5
0.47	R47	-	-	-	-	-	4x5
1.0	1R0	-	-	-	-	-	4x5
2.2	2R2	-	-	-	-	4x5	5x5
3.3	3R3	-	-	-	5x5	5x5	5x5
4.7	4R7	-	-	4x5	5x5	5x5	6.3x5
10	100	-	4x5	5x5	6.3x5	6.3x5	-
22	220	5x5	6.3x5	6.3x5	-	-	-
33	330	6.3x5	6.3x5	6.3x5	-	-	-
47	470	6.3x5	-	-	-	-	-

LEAD SPACING AND DIAMETER (mm)

Case Dia. (D ϕ)	4	5	6.3
Lead Space (F)	1.5	2.0	2.5
Lead Dia. (d ϕ)	0.45	0.45	0.45



PART NUMBER SYSTEM



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

