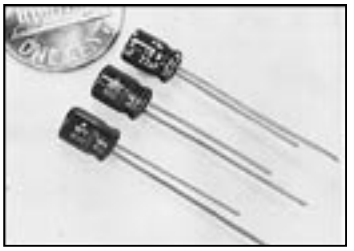
Miniature Aluminum Electrolytic Capacitors

NSRW Series

SUPER LOW PROFILE, WIDE TEMPERATURE,
RADIAL LEADS, POLARIZED

RoHS Compliant
includes all homogeneous materials

*See Part Number System for Details



FEATURES

- 5mm MAX. HEIGHT
- EXTENDED TEMPERATURE -55 TO +105°C

CHARACTERISTICS

Rated Working Voltage Range	6.3 ~ 50Vdc						
Capacitance Range	0.1 ~ 100µF						
Operating Temperature Range	-55°C~+105°C						
Capacitance Tolerance	±20% (M)						
Max. Leakage Current After 2 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	0.26	0.22	0.16	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					

MAXIMUM E.S.R. (Ω AT 120Hz AND 20°C)

Cap (µF)	Working Voltage (Vdc)					
	6.3	10	16	25	35	50
0.1	-	-	-	-	-	1660
0.22	-	-	-	-	-	755
0.33	-	-	-	-	-	503
0.47	-	-	-	-	-	353
1.0	-	-	-	-	-	166
2.2	-	-	-	-	-	166
3.3	-	-	-	-	-	75.5
4.7	-	-	-	49.4	42.4	35.3
10	-	-	26.6	23.3	19.9	16.6
22	19.6	16.6	12.1	10.6	9.1	-
33	13.1	11.1	8.1	7.1	-	-
47	9.2	7.8	5.7	-	-	-
100	4.4	-	-	-	-	-

MAXIMUM PERMISSIBLE RIPPLE CURRENT (mA rms AT 120Hz AND 105°C)

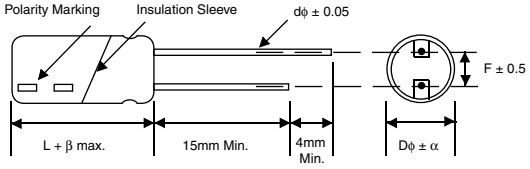
Cap (µF)	Working Voltage (Vdc)					
	6.3	10	16	25	35	50
0.1	-	-	-	-	-	0.7
0.22	-	-	-	-	-	1.6
0.33	-	-	-	-	-	2.5
0.47	-	-	-	-	-	3.5
1.0	-	-	-	-	-	7.0
2.2	-	-	-	-	-	11
3.3	-	-	-	-	-	13
4.7	-	-	-	14	14	16
10	-	-	18	20	21	24
22	22	25	27	36	38	-
33	27	30	40	44	-	-
47	33	41	48	-	-	-
100	50	-	-	-	-	-

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 5
0.22	R22	-	-	-	-	-	4 x 5
0.33	R33	-	-	-	-	-	4 x 5
0.47	R47	-	-	-	-	-	4 x 5
1.0	1R0	-	-	-	-	-	4 x 5
2.2	2R2	-	-	-	-	-	4 x 5
3.3	3R3	-	-	-	-	-	4 x 5
4.7	4R7	-	-	-	4 x 5	4 x 5	5 x 5
10	100	-	-	4 x 5	5 x 5	5 x 5	6.3 x 5
22	220	4 x 5	5 x 5	5 x 5	6.3 x 5	6.3 x 5	-
33	330	5 x 5	5 x 5	6.3 x 5	6.3 x 5	-	-
47	470	5 x 5	6.3 x 5	6.3 x 5	-	-	-
100	101	6.3 x 5	-	-	-	-	-

LEAD SPACING AND DIAMETER (mm)

Case Dia. (DØ)	4	5	6.3
Leads Dia. (dØ)	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

NSRW 100 M 16V 4X5 F

- F — RoHS Compliant
- 4X5 — Case Size (Dϕ x L)
- 16V — Working Voltage (Vdc)
- M — Tolerance Code (M=20%)
- 100 — Capacitance Code: First 2 characters significant, third character is multiplier
- NSRW — Series

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**