

SUPER LOW PROFILE, WIDE TEMPERATURE,
RADIAL LEADS, POLARIZED

FEATURES

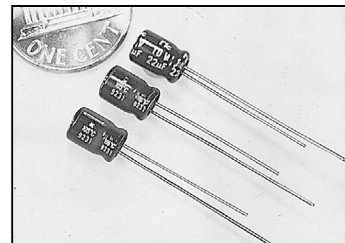
- 5mm MAX. HEIGHT
- EXTENDED TEMPERATURE -55 TO +105°C

CHARACTERISTICS

Rated Voltage Range	6.3 ~ 50VDC						
Capacitance Range	10 ~ 100 μ F						
Operating Temperature Range	-55°C ~ +105°C						
Capacitance Tolerance	$\pm 20\%$ (M)						
Maximum Leakage Current After 2 minutes	0.01CV or 3 μ A whichever is greater						
Max. Tan δ at 120Hz/20°C	W.V. (Vdc)	6.3	10	16	25	35	50
	S.V. (Vdc)	8	13	20	32	44	63
	Tan δ	0.26	0.22	0.16	0.14	0.12	0.10
Low Temperature Stability Impedance Ratio @ 120Hz	Z-40°C/Z+20°C	4	3	2	2	2	2
	Z-55°C/Z+20°C	6	5	4	3	3	3
Load Life Test @ 105°C 1,000 hours	Δ Capacitance	Within $\pm 25\%$ of initial measured value					
	Δ Tan δ	Less than 200% of specified value					
	Δ LC	Less than specified value					

**RoHS
Compliant**
includes all homogeneous materials

*See Part Number System for Details



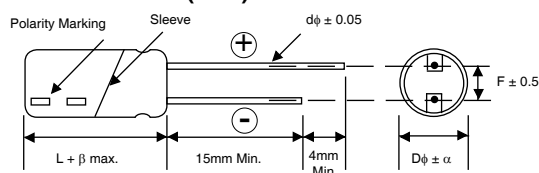
STANDARD PRODUCT AND CASE SIZE TABLE D ϕ xL (mm)

Cap. (μ F)	Code	Working Voltage (Vdc)					
		6.3	10	16	25	35	50
10	100	-	-	-	-	-	6.3x5
22	220	-	-	-	-	6.3x5	-
33	330	-	-	6.3x5	6.3x5	-	-
47	470	-	6.3x5	6.3x5	-	-	-
100	101	6.3x5	-	-	-	-	-

LEAD SPACING AND DIAMETER (mm)

Case Dia. (D ϕ)	6.3
Lead Dia. (d ϕ)	0.45
Lead Spacing (F)	2.5
Dim. α	0.5
Dim. β	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.

PART NUMBER SYSTEM

NSRW 470 M 16V 6.3X5 TB F

Series: NSRW
Capacitance Code: First 2 characters significant, third character is multiplier (470)
Tolerance Code (M=20%) (M)
Working Voltage (Vdc) (16V)
Case Size (D ϕ xL) (6.3X5)
TB = Tape & Box*
F = RoHS Compliant

*see tape specification for details

PRECAUTIONS

Please review the notes on correct use, safety and precautions found at www.nicomp.com/precautions
If in doubt or uncertainty, please review your specific application - process details with NIC's technical support personnel: tpmg@nicomp.com



STANDARD VALUES, SPECIFICATIONS AND CASE SIZES (mm)

Part Number	Cap. (μF)	W.V. (Vdc)	Dissipation Factor +20°C/120Hz	Ripple Current Rating (mA) +105°C/100KHz	Max. ESR (Ω) +20°C/100KHz	Load Life Hours @ +105°C
NSRW101M6.3V6.3x5F	100	6.3	0.26	50	4.4	1,000
NSRW470M10V6.3x5F	47	10	0.22	41	7.8	1,000
NSRW330M16V6.3x5F	33	16	0.16	40	8.1	1,000
NSRW470M16V6.3x5F	47		0.16	48	5.7	1,000
NSRW220M25V6.3x5F	22	25	0.14	36	10.6	1,000
NSRW330M25V6.3x5F	33		0.14	44	7.1	1,000
NSRW220M35V6.3x5F	22	35	0.12	38	9.1	1,000
NSRW100M50V6.3x5F	10	50	0.10	24	16.6	1,000

RIPPLE CURRENT FREQUENCY CORRECTION FACTORS

Capacitance (μF)	Frequency			
	100Hz ≤ F < 1KHz	1KHz ≤ F < 10KHz	10KHz ≤ F < 100KHz	100KHz ≤ F
C ≤ 4.7	0.50	0.65	0.95	1.00
4.7 < C ≤ 33	0.60	0.75	0.95	1.00
33 < C	0.75	0.85	0.95	1.00