

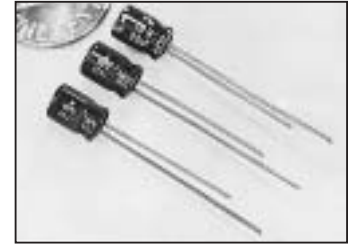
LOW PROFILE, SUB-MINIATURE, RADIAL LEADS,  
NON-POLAR ALUMINUM ELECTROLYTIC

### FEATURES

- BI-POLAR
- 5mm HEIGHT / LOW PROFILE

**RoHS Compliant**  
includes all homogeneous materials

\*See Part Number System for Details



### CHARACTERISTICS

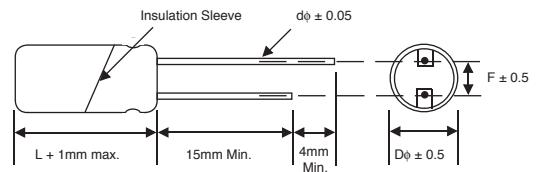
Rated Voltage Range	6.3 ~ 50Vdc						
Capacitance Range	0.1 ~ 47 $\mu$ F						
Operating Temperature Range	-40 ~ +85°C						
Capacitance Tolerance	$\pm$ 20%(M)						
Max. Leakage Current After 1 minutes At +20°C	0.03CV +6 $\mu$ A						
Surge Voltage & Max. Tan $\delta$ @ 120Hz/+20°C	W.V. (Vdc)	6.3	10	16	25	35	50
	S.V. (Vdc)	8	13	20	32	44	63
	Tan $\delta$	0.24	0.22	0.20	0.20	0.20	0.18
Low Temperature Stability (Impedance Ratio @ 120Hz)	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 at Rated W.V. & +85°C 1,000 Hours (Polarity Shall Be Reversed Every 250 Hours)	Capacitance Change	Within $\pm$ 25% of initial measured value					
	Tan $\delta$	Less than 200% of specified maximum value					
	Leakage Current	Less than specified maximum value					

### STANDARD PRODUCT AND CASE SIZE TABLE D $\phi$ x L (mm)

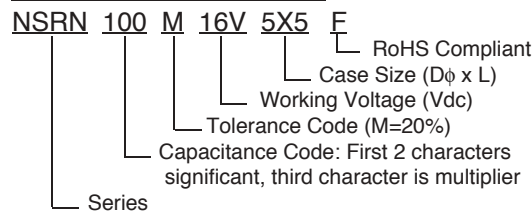
Cap. ( $\mu$ F)	Code	Working Voltage (Vdc)					
		6.3	10	16	25	35	50
0.1	R10	-	-	-	-	-	4x5
0.22	R22	-	-	-	-	-	4x5
0.33	R33	-	-	-	-	-	4x5
0.47	R47	-	-	-	-	-	4x5
1.0	1R0	-	-	-	-	-	4x5
2.2	2R2	-	-	-	-	4x5	5x5
3.3	3R3	-	-	-	5x5	5x5	5x5
4.7	4R7	-	-	4x5	5x5	5x5	6.3x5
10	100	-	4x5	5x5	6.3x5	6.3x5	-
22	220	5x5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

### LEAD SPACING AND DIAMETER (mm)

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



### 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](http://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](mailto:tpmg@niccomp.com)

## STANDARD PRODUCT, SPECIFICATIONS AND CASE SIZES D $\phi$ x L (mm)

Part Number	Cap. ( $\mu$ F)	W.V. (Vdc)	Dissipation Factor +20°C/120Hz	Ripple Current Rating (mA) +85°C/120Hz	Max. ESR ( $\Omega$ ) +20°C/120Hz	Load Life Hours @ +85°C	
NSRN220M6.3V5x5F	22	6.3	0.24	28	18.1	1,000	
NSRN330M6.3V6.3x5F	33		0.24	37	12.1	1,000	
NSRN470M6.3V6.3x5F	47		0.24	45	8.47	1,000	
NSRN220M10V4x5F	22	10	0.22	17	33.2	1,000	
NSRN330M10V6.3x5F	33		0.22	33	15.1	1,000	
NSRN470M10V6.3x5F	47		0.22	41	10.1	1,000	
NSRN4R7M16V4x5F	4.7	16	0.20	12	60.0	1,000	
NSRN100M16V5x5F	10		0.20	23	28.2	1,000	
NSRN220M16V6.3x5F	22		0.20	37	12.8	1,000	
NSRN330M16V6.3x5F	33		0.20	49	8.05	1,000	
NSRN3R3M25V5x5F	3.3		25	0.20	12	85.5	1,000
NSRN4R7M25V5x5F	4.7	0.20		16	60.0	1,000	
NSRN100M25V6.3x5F	10	0.20		27	28.2	1,000	
NSRN2R2M35V4x5F	2.2	35		0.20	8.4	113	1,000
NSRN3R3M35V5x5F	3.3			0.20	16	75.5	1,000
NSRN4R7M35V5x5F	4.7		0.20	18	53.0	1,000	
NSRN100M35V6.3x5F	10		0.20	29	24.9	1,000	
NSRNR10M50V4x5F	0.1		50	0.18	1.0	2490	1,000
NSRNR22M50V4x5F	0.22	0.18		2.0	1132	1,000	
NSRNR33M50V4x5F	0.33	0.18		2.8	755	1,000	
NSRNR47M50V4x5F	0.47	0.18		4.0	530	1,000	
NSRN1R0M50V4x5F	1.0	0.18		8.4	249	1,000	
NSRN2R2M50V5x5F	2.2	0.18		13	113	1,000	
NSRN3R3M50V5x5F	3.3	0.18		17	75.5	1,000	
NSRN4R7M50V6.3x5F	4.7	0.18		20	53.0	1,000	