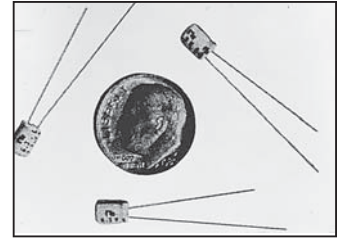


FEATURES

- LOW PROFILE 5mm HEIGHT
- SPACE SAVING AT COMPETITIVE PRICING

RoHS Compliant
includes all homogeneous materials

*See Part Number System for Details



CHARACTERISTICS

Rated Voltage Range		4 ~ 50Vdc							
Capacitance Range		10 ~ 470μF							
Operating Temperature Range		-40 ~ +85°C							
Capacitance Tolerance		±20%(M)							
Max. Leakage Current @ 20°C	After 1 min.	0.01CV or 3μA, whichever is greater							
Max. Tan δ @ 120Hz/+20°C		W.V. (Vdc)	4	6.3	10	16	25	35	50
		S.V. (Vdc)	5	8	13	20	32	44	63
		Tan δ	0.35	0.24	0.20	0.16	0.14 (8φ=0.15)	0.12	0.10
Low Temperature Stability Impedance Ratio @ 120Hz		Z-25°C/Z+20°C	7	4	3	2	2	2	2
		Z-40°C/Z+20°C	15	10	8	6	4	4	4
Load Life Test at Rated W.V. +85°C 1,000 Hours		Capacitance Change	Within ±25% of initial measured value						
		Tan δ	Less than 200% of specified maximum value						
		Leakage Current	Less than specified maximum value						

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

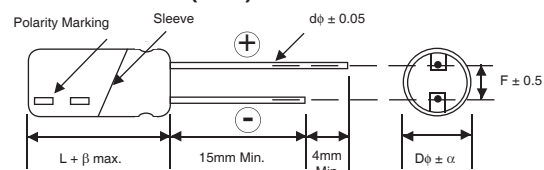
Cap. (μF)	Code	Working Voltage (Vdc)						
		4	6.3	10	16	25	35	50
10	100	-	-	-	-	-	-	6.3x5
22	220	-	-	-	-	6.3x5	6.3x5	6.3x5
33	330	-	-	-	6.3x5	6.3x5	6.3x5	-
47	470	-	-	6.3x5	6.3x5	6.3x5	6.3x5	-
100	101	-	6.3x5	6.3x5	6.3x5	8x5	-	-
220	221	6.3x5	6.3x5	6.3x5	-	-	-	-
330	331	6.3x5	6.3x5	-	-	-	-	-
470	471	8x5	-	-	-	-	-	-

LEAD SPACING AND DIAMETER (mm)

Case Dia. (Dφ)	6.3	8*
Lead Dia. (dφ)	0.5	0.6
Lead Spacing (F)	2.5	3.5
Dim. α	0.5	0.5
dim. β	1.5	1.5

*LEAD SPACING OF 8x5mm SIZE IS 2.5mm.

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.

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



STANDARD PRODUCT, SPECIFICATIONS AND CASE SIZES D ϕ x L (mm)

Part Number	Cap. (μ F)	W.V. (Vdc)	Dissipation Factor +20°C/120Hz	Ripple Current Rating (mA) +85°C/120Hz	Max. ESR (Ω) +20°C/120Hz	Load Life Hours @ +85°C
NSR221M4V6.3x5F	220	4	0.35	82	2.60	1,000
NSR331M4V6.3x5F	330		0.35	85	1.80	1,000
NSR471M4V8x5F	470		0.35	145	1.23	1,000
NSR101M6.3V6.3x5F	100	6.3	0.24	71	4.00	1,000
NSR221M6.3V6.3x5F	220		0.24	90	1.80	1,000
NSR331M6.3V6.3x5F	330		0.24	92	1.20	1,000
NSR470M10V6.3x5F	47	10	0.20	59	7.10	1,000
NSR101M10V6.3x5F	100		0.20	76	3.30	1,000
NSR221M10V6.3x5F	220		0.20	90	1.50	1,000
NSR330M16V6.3x5F	33	16	0.16	57	8.00	1,000
NSR470M16V6.3x5F	47		0.16	68	5.60	1,000
NSR101M16V6.3x5F	100		0.16	86	2.70	1,000
NSR220M25V6.3x5F	22	25	0.14	52	10.6	1,000
NSR330M25V6.3x5F	33		0.14	63	7.00	1,000
NSR470M25V6.3x5F	47		0.14	73	4.90	1,000
NSR101M25V8x5F	100		0.15	110	2.49	1,000
NSR220M35V6.3x5F	22	35	0.12	54	9.00	1,000
NSR330M35V6.3x5F	33		0.12	68	6.00	1,000
NSR470M35V6.3x5F	47		0.12	73	4.20	1,000
NSR100M50V6.3x5F	10	50	0.10	34	16.6	1,000
NSR220M50V6.3x5F	22		0.10	54	7.50	1,000

RIPPLE CURRENT FREQUENCY CORRECTION FACTOR

Frequency (Hz)	120	1K	10K	100K
Correction Factor	6.3x5	1.00	1.15	1.20
	8x5	1.00	1.13	1.15

PART NUMBER SYSTEM

