

FEATURES

- EXTENDED TEMPERATURE **+125°C**
- CYLINDRICAL V-CHIP CONSTRUCTION FOR SURFACE MOUNTING
- WIDE TEMPERATURE RANGE AND HIGH RIPPLE CURRENT
- DESIGNED FOR AUTOMATIC MOUNTING AND REFLOW SOLDERING

**RoHS
Compliant**

includes all homogeneous materials

*See Part Number System for Details



CHARACTERISTICS

Rated Voltage Range	6.3 ~ 50 Vdc						
Rated Capacitance Range	33 ~ 1500μF						
Operating Temperature Range	-40° ~ +125°C						
Capacitance Tolerance	±20%(M), ±10%(K)*						
Max. Leakage Current After 2 Minutes at 20°C	0.01CV or 3μA, whichever is greater						
Surge Voltage & Max. Tan δ	W.V. (Vdc)	6.3	10	16	25	35	50
	S.V. (Vdc)	8.0	13	20	32	44	63
	Tanδ @ 120Hz/20°C	0.30	0.24	0.20	0.16	0.14	0.14
Low Temperature Stability (Impedance Ratio @ 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 at Rated W.V. 125°C 1,500 Hours	Capacitance Change	Within +25% of initial measured value					
	Tanδ	Less than 300% of specified value					
	Leakage Current	Less than specified value					

*Optional ± 10% (K) Tolerance available on most values. Contact factory for availability.

MAXIMUM PERMISSIBLE RIPPLE CURRENT (mA rms AT 120Hz AND 125°C)

Cap. (μF)	Working Voltage					
	6.3	10	16	25	35	50
33	-	-	-	-	-	100
47	-	-	-	-	110	160
100	-	-	-	110	190	210
150	-	-	-	-	250	220
220	-	-	120	200	260	220
330	-	120	210	270	-	-
470	140	210	290	-	-	-
680	210	300	300	-	-	-
1000	330	320	-	-	-	-
1500	350	-	-	-	-	-

MAXIMUM ESR (Ω AT 120Hz AND 20°C)

Cap. (μF)	Working Voltage (Vdc)					
	6.3	10	16	25	35	50
33	-	-	-	-	-	7.05
47	-	-	-	-	4.95	4.95
100	-	-	-	2.65	2.32	2.32
150	-	-	-	-	1.55	1.55
220	-	-	1.51	1.21	1.06	1.06
330	-	1.21	1.01	0.81	-	-
470	1.06	0.85	0.71	-	-	-
680	0.73	0.59	0.49	-	-	-
1000	0.50	0.40	-	-	-	-
1500	0.33	-	-	-	-	-

RIPPLE CURRENT FREQUENCY CORRECTION FACTOR

Frequency (Hz)	100 ≤ f < 1K	1K ≤ f < 10K	10K ≤ f < 100K	100K ≤ f
C ≤ 33μF	1.0	1.2	1.3	1.45
33μF < C	1.0	1.1	1.2	1.3

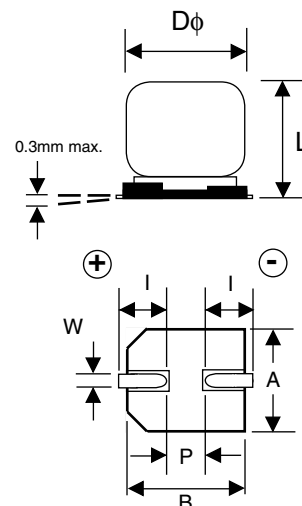
PRECAUTIONS

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 AND CASE SIZE D ϕ x L (mm)

Cap.(μ F)	Code	Working Voltage (Vdc)					
		6.3	10	16	25	35	50
33	330	-	-	-	-	-	8x10.5
47	470	-	-	-	-	8x10.5	10x10.5
100	101	-	-	-	8x10.5	10x10.5	12.5x14
150	151	-	-	-	-	12.5x14	12.5x14
220	221	-	-	8x10.5	10x10.5	12.5x14	12.5x14
330	331	-	8x10.5	10x10.5	12.5x14	-	-
470	471	8x10.5	10x10.5	12.5x14	-	-	-
680	681	10x10.5	12.5x14	12.5x14	-	-	-
1000	102	12.5x14	12.5x14	-	-	-	-
1500	152	12.5x14	-	-	-	-	-



DIMENSIONS (mm)

Case Size	D ϕ ± 0.5	L max.	A, B ± 0.2	H max.	I ± 0.3	P ± 0.3	W	K
8 x 10.5	8.0	10.5	8.3	10.0	3.4	3.1	0.9 ± 0.2	0.7 ± 0.2
10 x 10.5	10.0	10.5	10.3	12.0	3.5	4.6	0.9 ± 0.2	0.7 ± 0.2
12.5 x 14T2	12.5	14.0	13.5	15.0	4.7	4.4	0.9 ± 0.3	0.7 ± 0.3

PART NUMBER SYSTEM

NACT 101 M 25V 8x10.8 TR 13 F

- NACT**: Series
- 101**: Capacitance Code in μ F, first 2 digits are significant, third digit is no. of zeros, "R" indicates decimal for values under 10 μ F
- M**: Tolerance Code M=20%, K=10%
- 25V**: Working Voltage
- 8x10.8**: Size in mm
- TR**: Tape & Reel
- 13 F**: RoHS Compliant 97% Sn (min.), 3% Bi (max.) 330mm (13") Reel