Surface Mount Aluminum Electrolytic Capacitors NACEN Series

FEATURES

- CYLINDRICAL V-CHIP CONSTRUCTION FOR SURFACE MOUNTING
- NON-POLARIZED, 2000 HOURS AT 85°C
- 5.5mm HEIGHT
- ANTI-SOLVENT (2 MINUTES)
- DESIGNED FOR REFLOW SOLDERING

RoHS Compliant
includes all homogeneous materials
*See Part Number System for Details

CHARACTERISTICS

Rated Voltage Rating	6.3 ~ 50Vdc						
Rated Capacitance Range	0.1 ~ 47µF						
Operating Temperature Range	-40° ~ +85°C						
Capacitance Tolerance	±20%(M), ±10%(K)*						
Max. Leakage Current After 1 Minutes at 20°C	0.03CV +6µA maximum						
Max. Tanδ @ 120Hz/20°C	W.V. (Vdc)	6.3	10	16	25	35	50
	Tanδ @ 120Hz/20°C	0.24	0.20	0.17	0.17	0.15	0.15
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-40°C/Z +20°C	8	8	4	4	3	3
Load Life Test at Rated W.V. 85°C 2,000 Hours (Reverse polarity every 500 hours)	Capacitance Change	Within ±25% of initial measured value					
	Tanδ	Less than 200% of specified value					
	Leakage Current	Less than specified value					

MAXIMUM PERMISSIBLE RIPPLE CURRENT (mA rms AT 120Hz AND 85°C)

Cap. (µF)	Working Voltage (Vdc)					
	6.3	10	16	25	35	50
0.1	-	-	-	-	-	1.0
0.22	-	-	-	-	-	2.3
0.33	-	-	-	-	-	3.5
0.47	-	-	-	-	-	5.0
1.0	-	-	-	-	-	10
2.2	-	-	-	-	8.4	15
3.3	-	-	-	10	17	18
4.7	-	-	12	19	20	23
10	-	17	25	28	30	23
22	31	35	39	-	-	-
33	39	43	57	-	-	-
47	47	-	-	-	-	-

STANDARD PRODUCT AND CASE SIZE TABLE DXL (mm)

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

*Denotes values available in optional 10% tolerance

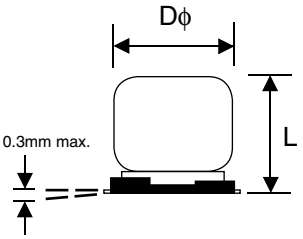
PART NUMBER SYSTEM

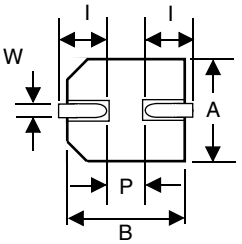
NACEN 100 M 16V 5x5.5 TR 13 F

- F — RoHS Compliant 97% Sn (min.), 3% Bi (max.)
- 13 — 330mm (13") Reel
- TR — Tape & Reel
- 5x5.5 — Size in mm
- 16V — Working Voltage
- M — Tolerance Code M=20%, K=10%
- 100 — Capacitance Code in µF, first 2 digits are significant. Third digit is no. of zeros, "R" indicates decimal for values under 10µF
- NACEN — Series

DIMENSIONS (mm)

Case Size	Dϕ±0.5	L max.	A/B±0.2	I ± 0.2	W	P±0.2
4x5.5	4.0	5.5	4.3	1.8	0.5 ~ 0.8	1.0
5x5.5	5.0	5.5	5.3	2.1	0.5 ~ 0.8	1.4
6.3x5.5	6.3	5.5	6.6	2.5	0.5 ~ 0.8	2.2





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**