

FEATURES

- CYLINDRICAL V-CHIP CONSTRUCTION FOR SURFACE MOUNT
- HIGH VOLTAGE (160VDC AND 400VDC)
- 8 x10.8mm ~ 16 x17mm CASE SIZES
- LONG LIFE (2000 HOURS AT +105°C)
- DESIGNED FOR REFLOW SOLDERING

RoHS

Compliant

includes all homogeneous materials

*See Part Number System for Details

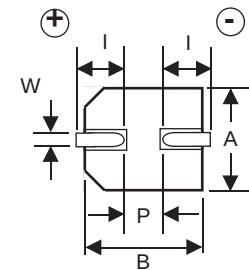
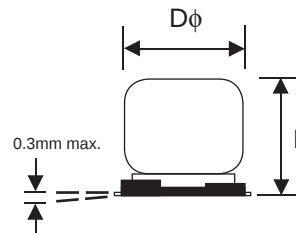


CHARACTERISTICS

Rated Voltage Range	160	200	250	400
Rated Capacitance Range	10 ~ 82	10 ~ 68	3.3 ~ 47	2.2 ~ 22
Operating Temperature Range	-40 ~ +105°C			
Capacitance Tolerance	±20% (M)			
Max. Leakage Current After 2 Minutes	0.03CV + 15μA			
	0.02CV + 25μA			
Max. Tanδ @ 120Hz	0.20	0.20	0.20	0.25
Low Temperature Stability (Impedance Ratio @ 120Hz)	Z-25°C/Z+20°C	3	3	6
	Z-40°C/Z+20°C	6	6	10
High Temperature Load Life at 105°C 2,000 hrs φD > 10mm 1,000 hrs φD = 8mm	Capacitance Change	Within ±25% of initial measured value		
	Tan δ	Less than 200% of specified value		
	Leakage Current	Less than the specified value		

STANDARD PRODUCTS AND CASE SIZES (mm)

Cap. (μF)	Code	Working Voltage			
		160	200	250	400
2.2	2R2	-	-	-	8x10.8
3.3	3R3	-	-	8x10.8	10x10.8
4.7	4R7	-	-	8x10.8	10x10.8
6.8	6R8	-	-	8x10.8	12.5x14
10	100	8x10.8	10x10.8	10x10.8	12.5x14
22	220	12.5x14	12.5x14	12.5x14	16x17
33	330	12.5x14	12.5x14	16x17	-
47	470	16x17	16x17	16x17	-
68	680	16x17	16x17	-	-
82	820	16x17	-	-	-



DIMENSIONS (mm)

Case Size	Dφ±0.5	L max.	A±0.2	B±0.2	I±0.2	W	P±0.2
8x10.8	8.0	10.8	8.3	8.3	2.9	0.7~1.0	3.2
10x10.8	10.0	10.8	10.3	10.3	3.2	1.1~1.4	4.6
12.5x14	12.5	14.0	12.8	12.8	4.5	1.1~1.4	4.6
16x17	16.0	17.0	16.3	16.3	5.0	1.8~2.1	7.0

PART NUMBER SYSTEM

NACV	100	M	200V	10x10.8	TR	13	F
Series	Capacitance Code in μF, first 2 digits are significant Third digit is no. of zeros, "R" indicates decimal for values under 10mF	Tolerance Code M=20%, K=10%	Working Voltage	Size in mm	Tape & Reel	330mm (13") Reel	RoHS Compliant 97% Sn (min.), 3% Bi (max.)

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



Surface Mount Aluminum Electrolytic Capacitors NACV Series

NIC Part Number	Cap. (μ F)	W.V. (Vdc)	Dissipation Factor (Tan δ)	Max. Ripple Current (mA) +105°C/120Hz	Max. ESR (Ω) +20°C/120Hz	Load Life Hours @ +105°C
NACV100M160V8x10.8TR13F	10	160	0.20	57	33.2	1,000
NACV220M160V12.5x14TR13F	22		0.20	112	15.1	2,000
NACV330M160V12.5x14TR13F	33		0.20	137	10.1	2,000
NACV470M160V16x17TR13F	47		0.20	180	7.1	2,000
NACV680M160V16x17TR13F	68		0.20	215	4.9	2,000
NACV820M160V16x17TR13F	82		0.20	235	4.0	2,000
NACV100M200V10x10.8TR13F	10	200	0.20	64	33.2	2,000
NACV220M200V12.5x14TR13F	22		0.20	112	15.1	2,000
NACV330M200V12.5x14TR13F	33		0.20	137	10.1	2,000
NACV470M200V16x17TR13F	47		0.20	180	7.1	2,000
NACV680M200V16x17TR13F	68		0.20	215	4.9	2,000
NACV3R3M250V8x10.8TR13F	3.3	250	0.20	31	100.5	1,000
NACV4R7M250V8x10.8TR13F	4.7		0.20	37	70.6	1,000
NACV6R8M250V8x10.8TR13F	6.8		0.20	44	48.8	1,000
NACV100M250V10x10.8TR13F	10		0.20	64	33.2	2,000
NACV220M250V12.5x14TR13F	22		0.20	112	15.1	2,000
NACV330M250V16x17TR13F	33		0.20	150	10.1	2,000
NACV470M250V16x17TR13F	47	400	0.20	180	7.1	2,000
NACV2R2M400V8x10.8TR13F	2.2		0.25	25	188.5	1,000
NACV3R3M400V10x10.8TR13F	3.3		0.25	36	125.7	2,000
NACV4R7M400V10x10.8TR13F	4.7		0.25	38	88.2	2,000
NACV6R8M400V12.5x14TR13F	6.8		0.25	47	61.0	2,000
NACV100M400V12.5x14TR13F	10		0.25	57	41.5	2,000
NACV220M400V16x17TR13F	22		0.25	115	18.8	2,000

Review & Compare Reflow Soldering Heat Limits
V-chip SMT Aluminum Electrolytic Capacitors
www.niccomp.com/RSL