

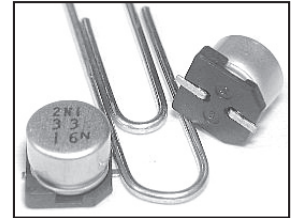
# Surface Mount Aluminum Electrolytic Capacitors NACNW Series

## FEATURES

- CYLINDRICAL V-CHIP CONSTRUCTION FOR SURFACE MOUNTING
- NON-POLARIZED, 1000 HOURS AT 105°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 Range	6.3 ~ 63Vdc							
Rated Capacitance Range	1.0 ~ 47 $\mu$ F							
Operating Temp. Range	-55 ~ +105°C							
Capacitance Tolerance	$\pm$ 20% (M)							
Max. Leakage Current After 1 Minutes @ 20°C	0.03CV + 8 $\mu$ A max.							
Tan $\delta$ @ 120Hz/20°C	W.V. (Vdc)	6.3	10	16	25	35	50	63
	Tan $\delta$ @ 120Hz/20°C	0.24	0.22	0.20	0.20	0.20	0.18	0.16
Low Temperature Stability Impedance Ratio @ 120Hz	W.V. (Vdc)	6.3	10	16	25	35	50	79
	Z -25°C/Z +20°C	3	3	2	2	2	2	2
	Z -40°C/Z +20°C	8	8	4	4	3	3	3
Load Life Test 105°C 1,000 Hours (Reverse polarity every 500 Hours)	Capacitance Change	Within $\pm$ 25% of initial measured value						
	Tan $\delta$	Less than 200% of specified max. value						
	Leakage Current	Less than specified max. value						

## STANDARD VALUES, CASE SIZES & SPECIFICATIONS

Part Number	Cap. ( $\mu$ F)	Working Voltage	Max. ESR ( $\Omega$ ) AT 120Hz/20°C	Max. Ripple Current (mA rms) AT 120Hz/105°C
NACNW220M6.3V5X5.5TR13F	22	6.3Vdc	18.09	22
NACNW330M6.3V6.3X5.5TR13F	33		12.06	27
NACNW470M6.3V6.3X5.5TR13F	47		8.47	33
NACNW100M10V4X5.5TR__F	10	10Vdc	36.49	12
NACNW220M10V6.3X5.5TR13F	22		16.59	25
NACNW330M10V6.3X5.5TR13F	33		11.06	30
NACNW4R7M16V4X5.5TR__F	4.7	16Vdc	70.58	8
NACNW100M16V5X5.5TR13F	10		33.17	17
NACNW220M16V6.3X5.5TR13F	22		15.08	27
NACNW330M16V6.3X5.5TR13F	33		10.05	40
NACNW3R3M25V4X5.5TR__F	3.3	25Vdc	100.53	7
NACNW4R7M25V5X5.5TR13F	4.7		70.58	13
NACNW100M25V6.3X5.5TR13F	10		33.17	20
NACNW2R2M35V4X5.5TR__F	2.2	35Vdc	150.79	5.9
NACNW3R3M35V5X5.5TR13F	3.3		100.53	12
NACNW4R7M35V5X5.5TR13F	4.7		70.58	14
NACNW100M35V6.3X5.5TR13F	10		33.17	21
NACNW1R0M50V4X5.5TR__F	1.0	50Vdc	298.57	7
NACNW2R2M50V5X5.5TR13F	2.2		135.71	10
NACNW3R3M50V5X5.5TR13F	3.3		90.47	13
NACNW4R7M50V6.3X5.5TR13F	4.7		63.52	16
NACNW100M50V6.3X5.5TR13F	10		23.89	18
NACNW1R0M63V4X5.5TR__F	1.0		63	265.39
NACNW2R2M63V5X5.5TR13F	2.2	120.63		10
NACNW3R3M63V6.3X5.5TR13F	3.3	80.42		13
NACNW4R7M63V6.3X5.5TR13F	4.7	54.47		16

Part Number Suffix Where \_\_: Preferred (15" reel) = 15, Legacy (13" reel) = 13 (check with NIC for availability)

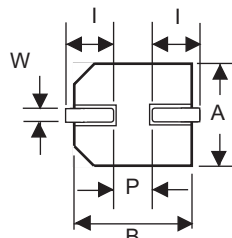
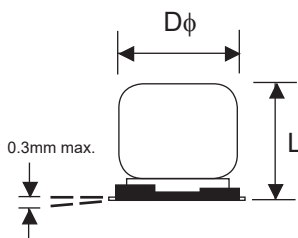
For Automotive Equipment see part number system



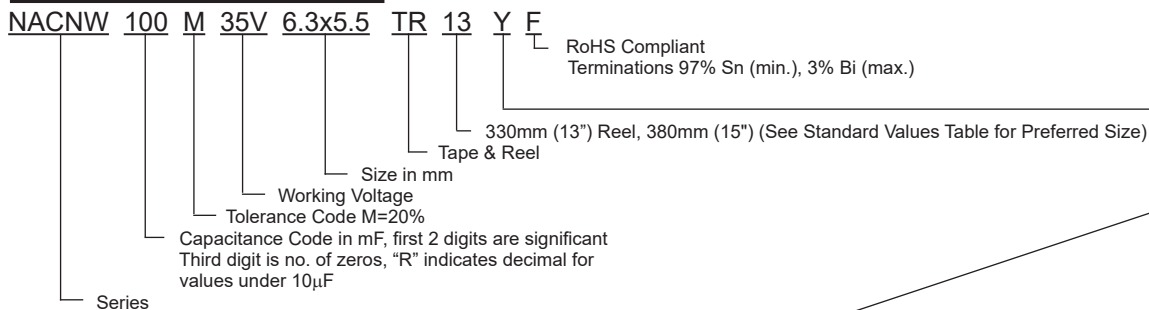
# Surface Mount Aluminum Electrolytic Capacitors NACNW Series

## DIMENSIONS (mm)

Case Size	D $\phi$ $\pm$ 0.5	L max.	A $\pm$ 0.2	I $\pm$ 0.2	W	P $\pm$ 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



## PART NUMBER SYSTEM



Optional: Suitable for automotive equipment, sourced to special production and inspection at TS-16949 certified production site

## PRECAUTIONS

Please review the notes on correct use, safety and precautions found at <https://www.niccomp.com/resource/files/aluminum/AlumApplInfoCautions.pdf>  
 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)



# Surface Mount Aluminum Electrolytic Capacitors NACNW Series

## CARRIER TAPE

Case Size	A ±0.2	B ±0.2	C ±0.3	D ±0.1	P ±0.1	T ±0.2
4 x 5.5	4.7	4.7	12.0	5.5	8.0	5.8
5 x 5.5	5.7	5.7	12.0	5.5	12.0	5.8
6.3 x 5.5	7.0	7.0	16.0	7.5	12.0	5.8

## TR13 330mm (13") REEL

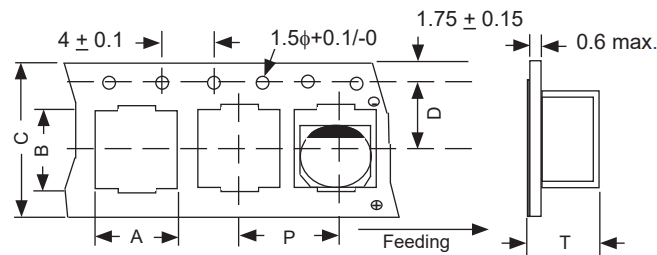
(See page 4 for plastic reel dimensions)

Case Size	W ±1	Quantity Per Reel
		13" Reel
4 x 5.5	14.0	1,500 pcs
5 x 5.5	14.0	1,000 pcs
6.3 x 5.5	18.0	1,000 pcs

## TAPING SPECIFICATIONS (mm)

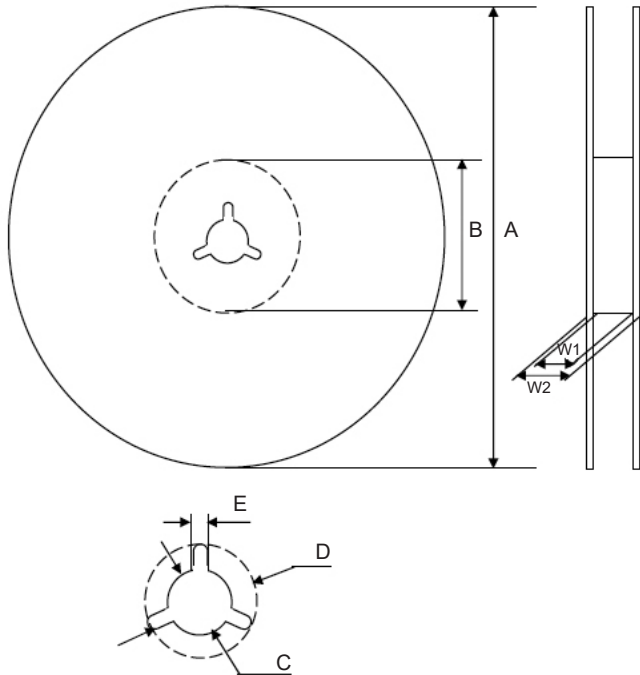
- Both Leader and Trailer tape: Minimum 40mm (1.57") empty carrier tape pockets.
- Leader tape: Approximately 20cm of cover tape at leader.
- Connection: Maximum 3 connections (slices) per reel.

## CARRIER



# Surface Mount Aluminum Electrolytic Capacitors NACNW Series

Optional V-Chip 13" (330mm) Reels (TR13 suffix)



Dimensions (mm)

Case Size	Tape Width	W1	W2
4x5.5, 5x5.5	12.0	12.4 ~ 14.4	15.5 ~ 20.0
6.3x5.5	16.0	16.4 ~ 18.4	19.5 ~ 24.0

Case Size	Tape Width	A	B	C	D	E
4x5.5, 5x5.5	12.0	$\phi 330$	$\phi 50 \sim 105$	$\phi 13$	$\phi 21$	2.0
6.3x5.5	16.0	$\pm 2.0$		$\pm 0.5$	$\pm 1.0$	$\pm 0.5$

Color
Black or Blue

## TR13 330mm (13") REEL

(See page 4 for plastic reel dimensions)

Case Size	W $\pm 1$	Quantity Per Reel
		13" Reel
4 x 5.5	14.0	1,500 pcs
5 x 5.5	14.0	1,000 pcs
6.3 x 5.5	18.0	1,000 pcs

