

Surface Mount Aluminum Electrolytic Capacitors NACEW Series

FEATURES

- CYLINDRICAL V-CHIP CONSTRUCTION
- WIDE TEMPERATURE -55 ~ +105°C
- DESIGNED FOR REFLOW SOLDERING

**RoHS
Compliant**
includes all homogeneous materials

*See Part Number System for Details



CHARACTERISTICS

| | | | | | | | | | | |
|---|---|--------------------|--|------|------|------|------|------|------|--|
| Rated Voltage Range | 6.3 ~ 100Vdc** | | | | | | | | | |
| Rate Capacitance Range | 0.1 ~ 6,800µF | | | | | | | | | |
| Operating Temp. Range | -55°C ~ +105°C (100V -40°C ~ +105 °C) | | | | | | | | | |
| Capacitance Tolerance | ±20% (M) | | | | | | | | | |
| Max. Leakage Current After 2 Minutes @ 20°C | 0.01CV or 3µA whichever is greater | | | | | | | | | |
| Max. Tan δ @ 120Hz/20°C | W.V. (Vdc) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | |
| | S.V. (Vdc) | 8 | 13 | 20 | 32 | 44 | 63 | 79 | 125 | |
| | 4 ~ 6.3mm Dia. | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | 0.10 | 0.12 | 0.10 | |
| | 8 & larger | 0.28 | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | 0.12 | 0.10 | |
| Low Temperature Stability Impedance Ratio @ 120Hz | W.V. (Vdc) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | |
| | Z-40°C/Z+20°C | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | Z-55°C/Z+20°C | 8 | 6 | 4 | 4 | 3 | 3 | 3 | - | |
| Load Life Test | 4 ~ 6.3mm Dia. & 10x8mm +105°C 1,000 hours +95°C 2,000 hours +85°C 4,000 hours | Capacitance Change | Within ± 25% of initial measured value | | | | | | | |
| | | Tan δ | Less than 200% of specified max. value | | | | | | | |
| | 8 ~ 16mm Dia. +105°C 2,000 hours +95°C 4,000 hours +85°C 8,000 hours | Leakage Current | Less than specified max. value | | | | | | | |

** For higher voltages, 200V and 400V, see NACV series.

STANDARD PRODUCT AND CASE SIZE TABLE DφxL (mm)

| Cap. (µF) | Code | Working Voltage (Vdc) | | | | | | | |
|-----------|------|-----------------------|----------------|----------------|-----------------|----------------|---------|---------|---------|
| | | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 |
| 0.1 | R10 | - | - | - | - | - | 4x5.5 | 4x5.5 | - |
| 0.22 | R22 | - | - | - | - | - | 4x5.5 | 4x5.5 | - |
| 0.33 | R33 | - | - | - | - | - | 4x5.5 | 4x5.5 | - |
| 0.47 | R47 | - | - | - | - | - | 4x5.5 | 4x5.5 | - |
| 1.0 | 1R0 | - | - | - | - | - | 4x5.5 | 4x5.5 | 4x6.3 |
| 2.2 | 2R2 | - | - | - | - | - | 4x5.5 | 4x5.5 | 6.3x6.3 |
| 3.3 | 3R3 | - | - | - | - | - | 4x5.5 | 5x5.5 | 6.3x6.3 |
| 4.7 | 4R7 | - | - | - | 4x5.5 | 4x5.5 | 5x5.5 | 5x5.5 | 6.3x6.3 |
| 10 | 100 | - | - | 4x5.5 | 5x5.5 | 5x5.5 | 6.3x5.5 | 6.3x5.5 | 6.3x8 |
| 22 | 220 | 4x5.5 | 5x5.5 | 5x5.5 | 6.3x5.5 | 6.3x5.5 | 6.3x6.3 | 6.3x8 | 8x10.5 |
| 33 | 330 | 5x5.5 | 5x5.5 | 6.3x5.5 | 6.3x5.5 | 6.3x6.3 | 6.3x8 | 8x10.5 | 10x10.5 |
| 47 | 470 | 5x5.5 | 6.3x5.5 | 6.3x5.5 | 6.3x6.3 | 6.3x6.3 | 6.3x8 | 8x10.5 | 12.5x14 |
| 100 | 101 | 6.3x5.5 | - | 6.3x5.5 | 6.3x8 | 6.3x8 | 8x10.5 | 10x10.5 | - |
| 150 | 151 | 6.3x5.5 | 6.3x6.3 | 6.3x8 | 8x10.5 | 8x10.5 10x8 | - | - | 16x17 |
| 220 | 221 | 6.3x6.3 | 6.3x8 | 6.3x8 | 8x10.5 10x8* | 8x10.5 | 10x10.5 | 12.5x14 | - |
| 330 | 331 | 6.3x8 | 8x10.5 | 8x10.5 10x8 | 8x10.5 | 10x10.5 | - | - | - |
| 470 | 471 | 8x10.5 | 8x10.5 10x8 | 8x10.5 | 10x10.5 | 12.5x14 | - | 16x17 | - |
| 1000 | 102 | 8x10.5 | 10x10.5 | - | 12.5x14 | - | 16x17 | - | - |
| 1500 | 152 | 10x10.5 | - | 12.5x14 | - | 16x17 | - | - | - |
| 2200 | 222 | - | 12.5x14 | - | 16x17 | - | - | - | - |
| 3300 | 332 | 12.5x14 | - | 16x17 | - | - | - | - | - |
| 4700 | 472 | - | 16x17 | - | - | - | - | - | - |
| 6800 | 682 | 16x17 | - | - | - | - | - | - | - |

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 NACEW Series

STANDARD VALUES, CASE SIZES AND SPECIFICATIONS

| NIC Part Number | Cap. (μF) | W.V. (Vdc) | Dissipation Factor (Tan δ) | Max. Ripple Current (mA) +105°C/120Hz | Maximum ESR (Ω) +20°C/120Hz | Load Life Hours @ +105°C | |
|---------------------------|-----------|------------|----------------------------|---------------------------------------|-----------------------------|--------------------------|-------|
| NACEW220M6.3V4X5.5TR13F | 22 | 6.3 | 0.24 | 22 | 18.1 | 1,000 | |
| NACEW330M6.3V5X5.5TR13F | 33 | | 0.24 | 27 | 12.1 | 1,000 | |
| NACEW470M6.3V5X5.5TR13F | 47 | | 0.24 | 33 | 8.47 | 1,000 | |
| NACEW101M6.3V6.3X5.5TR13F | 100 | | 0.24 | 50 | 3.98 | 1,000 | |
| NACEW151M6.3V6.3X5.5TR13F | 150 | | 0.24 | 55 | 2.66 | 1,000 | |
| NACEW221M6.3V6.3X6.3TR13F | 220 | | 0.24 | 67 | 1.81 | 1,000 | |
| NACEW331M6.3V6.3X8TR13F | 330 | | 0.24 | 105 | 1.21 | 1,000 | |
| NACEW471M6.3V8X10.5TR13F | 470 | | 0.28 | 210 | 0.99 | 2,000 | |
| NACEW102M6.3V8X10.5TR13F | 1000 | | 0.28 | 280 | 0.46 | 2,000 | |
| NACEW152M6.3V10X10.5TR13F | 1500 | | 0.28 | 310 | 0.31 | 2,000 | |
| NACEW332M6.3V12.5X14TR15F | 3300 | | 0.28 | 520 | 0.14 | 2,000 | |
| NACEW682M6.3V16X17TR15F | 6800 | | 0.28 | 930 | 0.093 | 2,000 | |
| NACEW220M10V5X5.5TR13F | 22 | | 10 | 0.20 | 25 | 15.1 | 1,000 |
| NACEW330M10V5X5.5TR13F | 33 | 0.20 | | 30 | 10.1 | 1,000 | |
| NACEW470M10V5X5.5TR13F | 47 | 0.20 | | 41 | 7.06 | 1,000 | |
| NACEW151M10V6.3X6.3TR13F | 150 | 0.20 | | 62 | 2.21 | 1,000 | |
| NACEW221M10V6.3X8TR13F | 220 | 0.20 | | 105 | 1.51 | 1,000 | |
| NACEW331M10V8X10.5TR13F | 330 | 0.24 | | 195 | 1.21 | 2,000 | |
| NACEW471M10V8X10.5TR13F | 470 | 0.24 | | 210 | 0.85 | 2,000 | |
| NACEW471M10V10X8TR13F | 470 | 0.24 | | 210 | 0.85 | 1,000 | |
| NACEW102M10V10X10.5TR13F | 1000 | 0.24 | | 310 | 0.40 | 2,000 | |
| NACEW222M10V12.5X14TR15F | 2200 | 0.24 | | 510 | 0.18 | 2,000 | |
| NACEW472M10V16X17TR15F | 4700 | 0.24 | | 880 | 0.11 | 2,000 | |
| NACEW100M16V4X5.5TR13F | 10 | 16 | | 0.16 | 18 | 26.5 | 1,000 |
| NACEW220M16V5X5.5TR13F | 22 | | | 0.16 | 27 | 12.1 | 1,000 |
| NACEW330M16V6.3X5.5TR13F | 33 | | 0.16 | 40 | 8.04 | 1,000 | |
| NACEW470M16V6.3X5.5TR13F | 47 | | 0.16 | 48 | 5.65 | 1,000 | |
| NACEW101M16V6.3X5.5TR13F | 100 | | 0.16 | 60 | 2.66 | 1,000 | |
| NACEW151M16V6.3X8TR13F | 150 | | 0.16 | 95 | 1.77 | 1,000 | |
| NACEW221M16V6.3X8TR13F | 220 | | 0.16 | 105 | 1.21 | 1,000 | |
| NACEW331M16V8X10.5TR13F | 330 | | 0.20 | 195 | 1.00 | 2,000 | |
| NACEW331M16V10X8TR13F | 330 | | 0.20 | 195 | 1.00 | 1,000 | |
| NACEW471M16V8X10.5TR13F | 470 | | 0.20 | 230 | 0.71 | 2,000 | |
| NACEW152M16V12.5X14TR15F | 1500 | | 0.20 | 500 | 0.23 | 2,000 | |
| NACEW332M16V16X17TR15F | 3300 | | 0.20 | 840 | 0.12 | 2,000 | |
| NACEW4R7M25V4X5.5TR13F | 4.7 | | 25 | 0.14 | 13 | 49.4 | 1,000 |
| NACEW100M25V5X5.5TR13F | 10 | 0.14 | | 20 | 23.2 | 1,000 | |
| NACEW220M25V6.3X5.5TR13F | 22 | 0.14 | | 36 | 10.6 | 1,000 | |
| NACEW330M25V6.3X5.5TR13F | 33 | 0.14 | | 44 | 7.04 | 1,000 | |
| NACEW470M25V6.3X6.3TR13F | 47 | 0.14 | | 48 | 4.95 | 1,000 | |
| NACEW101M25V6.3X8TR13F | 100 | 0.14 | | 91 | 2.32 | 1,000 | |
| NACEW151M25V8X10.5TR13F | 150 | 0.16 | | 140 | 1.77 | 2,000 | |
| NACEW221M25V8X10.5TR13F | 220 | 0.16 | | 175 | 1.21 | 2,000 | |
| NACEW221M25V10X8TR13F | 220 | 0.16 | | 175 | 1.21 | 1,000 | |
| NACEW331M25V8X10.5TR13F | 330 | 0.16 | | 220 | 0.80 | 2,000 | |
| NACEW471M25V10X10.5TR13F | 470 | 0.16 | | 300 | 0.57 | 2,000 | |
| NACEW102M25V12.5X14TR15F | 1000 | 0.16 | | 460 | 0.27 | 2,000 | |
| NACEW222M25V16X17TR15F | 2200 | 0.16 | | 805 | 0.14 | 2,000 | |
| NACEW4R7M35V4X5.5TR13F | 4.7 | 35 | 0.12 | 14 | 42.3 | 1,000 | |
| NACEW100M35V5X5.5TR13F | 10 | | 0.12 | 21 | 19.9 | 1,000 | |
| NACEW220M35V6.3X5.5TR13F | 22 | | 0.12 | 38 | 9.05 | 1,000 | |
| NACEW330M35V6.3X6.3TR13F | 33 | | 0.12 | 42 | 6.04 | 1,000 | |
| NACEW470M35V6.3X6.3TR13F | 47 | | 0.12 | 49 | 4.24 | 1,000 | |
| NACEW101M35V6.3X8TR13F | 100 | | 0.12 | 84 | 2.32 | 1,000 | |
| NACEW151M35V8X10.5TR13F | 150 | | 0.14 | 155 | 1.55 | 2,000 | |
| NACEW151M35V10X8TR13F | 150 | | 0.14 | 155 | 1.55 | 1,000 | |
| NACEW221M35V8X10.5TR13F | 220 | | 0.14 | 190 | 1.06 | 2,000 | |
| NACEW331M35V10X10.5TR13F | 330 | | 0.14 | 300 | 0.70 | 2,000 | |
| NACEW471M35V12.5X14TR15F | 470 | | 0.14 | 410 | 0.49 | 2,000 | |
| NACEW152M35V16X17TR15F | 1500 | | 0.14 | 740 | 0.15 | 2,000 | |

For Automotive Equipment see part number system



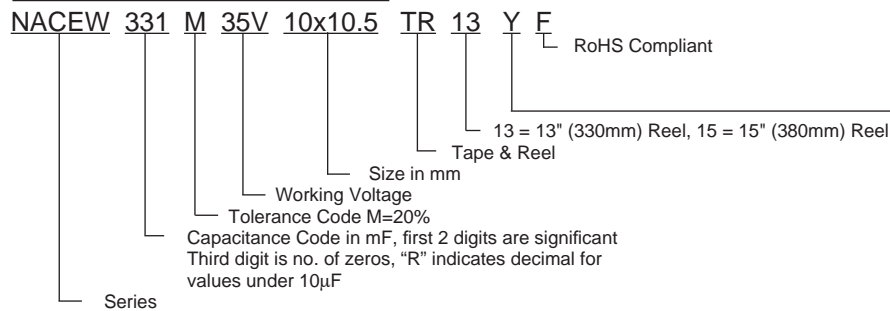
Surface Mount Aluminum Electrolytic Capacitors NACEW Series

STANDARD VALUES, CASE SIZES AND SPECIFICATIONS

| NIC Part Number | Cap. (μF) | W.V. (Vdc) | Dissipation Factor (Tan δ) | Max. Ripple Current (mA) +105°C/120Hz | Maximum ESR (Ω) +20°C/120Hz | Load Life Hours @ +105°C |
|---------------------------|-----------|------------|----------------------------|---------------------------------------|-----------------------------|--------------------------|
| NACEWR10M50V4X5.5TR13F | 0.1 | 50 | 0.10 | 0.7 | 1660 | 1,000 |
| NACEWR22M50V4X5.5TR13F | 0.22 | | 0.10 | 1.6 | 754 | 1,000 |
| NACEWR33M50V4X5.5TR13F | 0.33 | | 0.10 | 2.5 | 503 | 1,000 |
| NACEWR47M50V4X5.5TR13F | 0.47 | | 0.10 | 3.5 | 353 | 1,000 |
| NACEW1R0M50V4X5.5TR13F | 1.0 | | 0.10 | 7.0 | 166 | 1,000 |
| NACEW2R2M50V4X5.5TR13F | 2.2 | | 0.10 | 11 | 75.4 | 1,000 |
| NACEW3R3M50V4X5.5TR13F | 3.3 | | 0.10 | 13 | 50.3 | 1,000 |
| NACEW4R7M50V5X5.5TR13F | 4.7 | | 0.10 | 16 | 35.3 | 1,000 |
| NACEW100M50V6.3X5.5TR13F | 10 | | 0.10 | 24 | 16.6 | 1,000 |
| NACEW220M50V6.3X6.3TR13F | 22 | | 0.10 | 32 | 7.64 | 1,000 |
| NACEW330M50V6.3x8TR13F | 33 | | 0.10 | 60 | 5.03 | 1,000 |
| NACEW470M50V6.3x8TR13F | 47 | | 0.10 | 63 | 3.53 | 1,000 |
| NACEW101M50V8x10.5TR13F | 100 | | 0.12 | 140 | 1.99 | 2,000 |
| NACEW221M50V10X10.5TR13F | 220 | | 0.12 | 220 | 0.91 | 2,000 |
| NACEW102M50V16X17TR15F | 1000 | | 0.12 | 655 | 0.20 | 2,000 |
| NACEWR10M63V4X5.5TR13F | 0.1 | 63 | 0.12 | 0.7 | 1990 | 1,000 |
| NACEWR22M63V4X5.5TR13F | 0.22 | | 0.12 | 1.6 | 905 | 1,000 |
| NACEWR33M63V4X5.5TR13F | 0.33 | | 0.12 | 2.5 | 604 | 1,000 |
| NACEWR47M63V4X5.5TR13F | 0.47 | | 0.12 | 3.5 | 424 | 1,000 |
| NACEW1R0M63V4X5.5TR13F | 1.0 | | 0.12 | 7.0 | 199 | 1,000 |
| NACEW2R2M63V4X5.5TR13F | 2.2 | | 0.12 | 11 | 90.5 | 1,000 |
| NACEW3R3M63V4X5.5TR13F | 3.3 | | 0.12 | 14 | 60.3 | 1,000 |
| NACEW4R7M63V5X5.5TR13F | 4.7 | | 0.12 | 16 | 42.3 | 1,000 |
| NACEW100M63V6.3X5.5TR13F | 10 | | 0.12 | 24 | 19.9 | 1,000 |
| NACEW220M63V6.3X6.3TR13F | 22 | | 0.12 | 49 | 9.04 | 1,000 |
| NACEW330M63V6.3X8TR13F | 33 | | 0.12 | 112 | 6.03 | 1,000 |
| NACEW470M63V8X10.5TR13F | 47 | | 0.12 | 119 | 4.24 | 1,000 |
| NACEW101M63V8X10.5TR13F | 100 | | 0.12 | 196 | 1.99 | 2,000 |
| NACEW221M63V12.5X14TR15F | 220 | | 0.12 | 287 | 0.91 | 2,000 |
| NACEW471M63V16X17TR15F | 470 | | 0.12 | 630 | 0.42 | 2,000 |
| NACEW1R0M100V4X6.3TR13F | 1.0 | 100V | 0.10 | 7.0 | 166 | 1,000 |
| NACEW2R2M100V6.3X6.3TR13F | 2.2 | | 0.10 | 14 | 75.4 | 1,000 |
| NACEW3R3M100V6.3X6.3TR13F | 3.3 | | 0.10 | 20 | 50.3 | 1,000 |
| NACEW4R7M100V6.3X6.3TR13F | 4.7 | | 0.10 | 25 | 35.3 | 1,000 |
| NACEW100M100V6.3X8TR13F | 10 | | 0.10 | 35 | 16.6 | 1,000 |
| NACEW220M100V8X10.5TR13F | 22 | | 0.10 | 84 | 7.64 | 2,000 |
| NACEW330M100V10x10.5TR13F | 33 | | 0.10 | 133 | 5.03 | 2,000 |
| NACEW470M100V12.5X14TR15F | 47 | | 0.10 | 240 | 3.53 | 2,000 |
| NACEW151M100V16X17TR15F | 150 | | 0.10 | 500 | 1.10 | 2,000 |

For Automotive Equipment see part number system

PART NUMBER SYSTEM



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

| Case Diameter | Termination Material |
|---------------|----------------------|
| 4 ~ 10mm φ | 97% Sn, 3% Bi |
| 12.5mm | 99.3% Sn, 0.7% Bi |
| 16mm | 100% Sn |



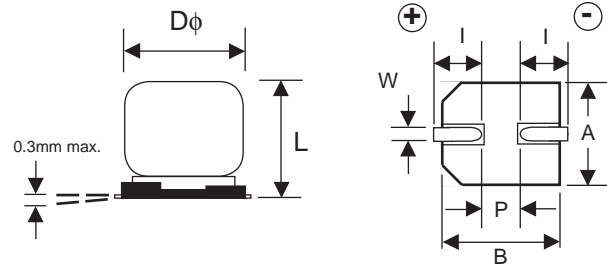
Surface Mount Aluminum Electrolytic Capacitors NACEW Series

RIPPLE CURRENT FREQUENCY CORRECTION FACTOR

| Frequency (Hz) | $f \leq 100$ | $100 > f \leq 1K$ | $1K > f \leq 10K$ | $f \geq 100K$ |
|-------------------|--------------|-------------------|-------------------|---------------|
| Correction Factor | 0.8 | 1.0 | 1.3 | 1.5 |

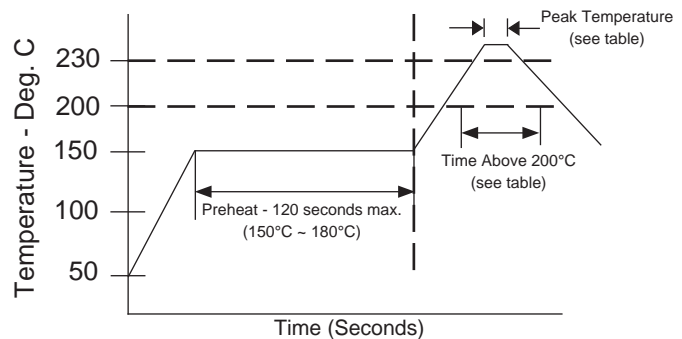
DIMENSIONS (mm)

| Case Size | $D\phi \pm 0.5$ | L max. | $A \pm 0.2$ | $B \pm 0.2$ | $I \pm 0.2$ | W | $P \pm 0.2$ |
|-----------|-----------------|--------|-------------|-------------|-------------|-----------|-------------|
| 4 x 5.5 | 4.0 | 5.5 | 4.3 | 4.3 | 1.8 | 0.5 ~ 0.8 | 1.0 |
| 5 x 5.5 | 5.0 | 5.5 | 5.3 | 5.3 | 2.1 | 0.5 ~ 0.8 | 1.4 |
| 6.3 x 5.5 | 6.3 | 5.5 | 6.6 | 6.6 | 2.5 | 0.5 ~ 0.8 | 2.2 |
| 6.3 x 6.3 | 6.3 | 6.3 | 6.6 | 6.6 | 2.5 | 0.5 ~ 0.8 | 2.2 |
| 6.3 x 8 | 6.3 | 8.0 | 6.6 | 6.6 | 2.5 | 0.5 ~ 0.8 | 2.2 |
| 8 x 6.5 | 8.0 | 6.5 | 8.3 | 8.3 | 3.4 | 0.5 ~ 0.8 | 2.2 |
| 8 x 10.5 | 8.0 | 10.5 | 8.3 | 8.3 | 2.9 | 0.7 ~ 1.0 | 3.2 |
| 10 x 8 | 10.0 | 8.0 | 10.3 | 10.3 | 3.2 | 0.7 ~ 1.4 | 4.6 |
| 10 x 10.5 | 10.0 | 10.5 | 10.3 | 10.3 | 3.2 | 0.7 ~ 1.4 | 4.6 |
| 12.5 x 14 | 12.5 | 14.0 | 12.8 | 12.8 | 4.5 | 0.6 ~ 1.4 | 4.6 |
| 16 x 17 | 16.0 | 17.5 | 17.0 | 17.0 | 5.5 | 0.9 ~ 1.5 | 6.7 |



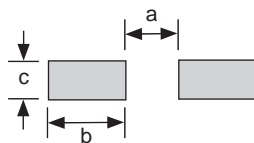
PEAK REFLOW TEMPERATURE AND DURATION

| Diameter | Time above 200°C | Peak Temperature 5 seconds |
|----------------|------------------|----------------------------|
| 4x5.5 | 70 sec. | 250°C |
| 4x6.3 | 60 sec. | 250°C |
| 5x5.5 | 70 sec. | 250°C |
| 6.3x5.5 (<63V) | 70 sec. | 250°C |
| 6.3x5.5 (100V) | 60 sec. | 250°C |
| 6.3x6.3 (<63V) | 70 sec. | 250°C |
| 6.3x6.3 (100V) | 60 sec. | 250°C |
| 6.3x8 (<63V) | 70 sec. | 250°C |
| 6.3x8 (100V) | 60 sec. | 250°C |
| 8x10.5 (<63V) | 60 sec. | 245°C |
| 8x10.5 (100V) | 60 sec. | 240°C |
| 10x10.5 (<63V) | 50 sec. | 240°C |
| 10x10.5 (100V) | 50 sec. | 235°C |
| 12.5x14 (<63V) | 50 sec. | 240°C |
| 12.5x14 (100V) | 50 sec. | 235°C |
| 12.5x14 (<63V) | 30 sec. | 230°C |
| 12.5x14 (100V) | 30 sec. | 230°C |



RECOMMENDED LAND PATTERN DIMENSIONS (mm)

| Case Size | a | b | c |
|-----------|-----|-----|-----|
| 4x5.5 | 1.0 | 2.6 | 1.8 |
| 4x6.3 | 1.0 | 2.6 | 1.8 |
| 5x5.5 | 1.4 | 3.0 | 1.8 |
| 6.3x5.5 | 2.1 | 3.5 | 1.8 |
| 6.3x6.3 | 2.1 | 3.5 | 1.8 |
| 6.3x8 | 2.1 | 3.5 | 1.8 |
| 8x10.5 | 3.0 | 4.1 | 2.2 |
| 10x10.5 | 4.3 | 4.4 | 2.5 |
| 12.5x14 | 4.2 | 5.8 | 2.5 |
| 16x17 | 6.0 | 6.5 | 4.0 |



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



Surface Mount Aluminum Electrolytic Capacitors NACEW Series

CARRIER TAPE

| Case Size | A ±0.5 | 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 |
| 6.3 x 6.3 | 7.0 | 7.0 | 16.0 | 7.5 | 12.0 | 6.6 |
| 6.3 x 8 | 7.0 | 7.0 | 16.0 | 7.5 | 12.0 | 8.3 |
| 8 x 6.5 | 8.7 | 8.7 | 16.0 | 7.5 | 12.0 | 6.8 |
| 8 X 10.5 | 8.7 | 8.7 | 24.0 | 11.5 | 16.0 | 11.1 |
| 10 x 8 | 10.7 | 10.7 | 24.0 | 11.5 | 16.0 | 8.3 |
| 10 x 10.5 | 10.7 | 10.7 | 24.0 | 11.5 | 16.0 | 11.2 |
| 12.5 x 14 | 13.2 | 13.2 | 32.0 | 14.2 | 24.0 | 14.2 |
| 16 x 17 | 17.5 | 17.5 | 44.0 | 20.2 | 28.0 | 17.5 |

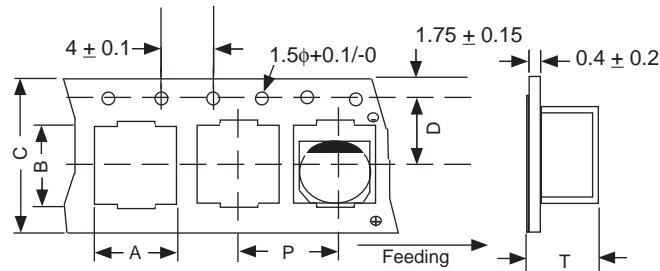
TR13 330mm (13") REEL TR15 380mm (15") REEL

| Case Size | W ±1.0 | Quantity Per Reel | |
|-----------|--------|-------------------|-----------|
| | | 13" Reel | 15" Reel |
| 4 x 5.5 | 14.0 | 1,500 pcs | 2,000 pcs |
| 5 x 5.5 | 14.0 | 1,000 pcs | 1,000 pcs |
| 6.3 x 5.5 | 18.0 | 1,000 pcs | 1,000 pcs |
| 6.3 x 6.3 | 18.0 | 800 pcs | 1,000 pcs |
| 6.3 x 8 | 18.0 | 500 pcs | 900 pcs |
| 8 x 6.5 | 18.0 | 800 pcs | 1,000 pcs |
| 8 X 10.5 | 26.0 | 300 pcs | 500 pcs |
| 10 x 8 | 26.0 | 400 pcs | 500 pcs |
| 10 x 10.5 | 26.0 | 300 pcs | 500 pcs |
| 12.5 x 14 | 34.0 | N/A | 250 pcs |
| 16 x 17 | 46.0 | N/A | 200 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



REEL

