

RADIAL LEADS, POLARIZED, STANDARD SIZE, EXTENDED TEMPERATURE

FEATURES

- REDUCED CASE SIZING
- -55°C ~ +105°C OPERATING TEMPERATURE
- HIGH STABILITY OVER LONG LIFE

EXTENDED TEMPERATURE

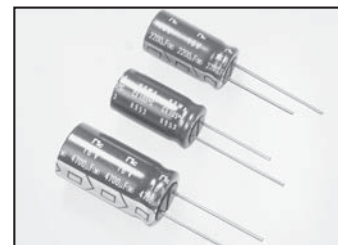
NRWA → **NRWS**

(today's standard) (reduced sizes)

**RoHS
Compliant**

includes all homogeneous materials

*See Part Number System for Details



CHARACTERISTICS

| | | | | | | | | | |
|---|---------------|---------------------------------------|------|------------------------------------|------|------|------|------|------|
| Rated Voltage Range | | 6.3 ~ 100VDC | | | | | | | |
| Capacitance Range | | 0.47 ~ 10,000μF | | | | | | | |
| Operating Temperature Range | | -55°C ~ +105°C | | | | | | | |
| Capacitance Tolerance | | ±20% (M) | | | | | | | |
| Maximum Leakage Current @ +20°C | | After 1 min. | | 0.03CV or 4μA whichever is greater | | | | | |
| | | After 2 min. | | 0.01CV or 3μA whichever is greater | | | | | |
| Max. Tan δ at 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 |
| | C ≤ 1,000μF | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 |
| | C = 2,200μF | 0.24 | 0.21 | 0.18 | 0.16 | 0.14 | 0.12 | - | - |
| | C = 3,300μF | 0.26 | 0.23 | 0.20 | 0.18 | 0.16 | - | - | - |
| | C = 4,700μF | 0.28 | 0.25 | 0.22 | 0.20 | - | - | - | - |
| | C = 6,800μF | 0.32 | 0.29 | 0.26 | - | - | - | - | - |
| C = 10,000μF | 0.40 | 0.37 | - | - | - | - | - | - | |
| Low Temperature Stability Impedance Ratio @ 120Hz | Z-25°C/Z+20°C | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 |
| | Z-40°C/Z+20°C | 8 | 6 | 4 | 3 | 3 | 3 | 3 | 3 |
| Load Life Test at Rated W.V +105°C 1,000 Hours: 5~12.5φ 2,000 Hours: 16φ | Δ Capacitance | Within ±20% of initial measured value | | | | | | | |
| | Δ Tan δ | Less than 200% of specified value | | | | | | | |
| | Δ LC | Less than specified value | | | | | | | |
| Shelf Life Test +105°C 1,000 Hours No Load | Δ Capacitance | Within ±20% of initial measured value | | | | | | | |
| | Δ Tan δ | Less than 200% of specified value | | | | | | | |
| | Δ LC | Less than specified value | | | | | | | |

STANDARD PRODUCT AND CASE SIZE TABLE Dφ x L (mm)

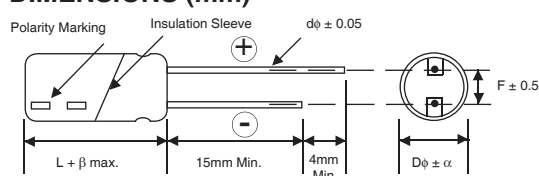
| Cap. (μF) | Code | Working Voltage (Vdc) | | | | | | | |
|-----------|------|-----------------------|---------|---------|---------|---------|---------|---------|---------|
| | | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 |
| 0.47 | R47 | - | - | - | - | - | 5x11 | - | 5x11 |
| 1.0 | 1R0 | - | - | - | - | - | 5x11 | - | 5x11 |
| 2.2 | 2R2 | - | - | - | - | - | 5x11 | - | 5x11 |
| 3.3 | 3R3 | - | - | - | - | - | 5x11 | 5x11 | 5x11 |
| 4.7 | 4R7 | - | - | - | 5x11 | 5x11 | 5x11 | 5x11 | 5x11 |
| 10 | 100 | - | - | 5x11 | 5x11 | 5x11 | 5x11 | 5x11 | 6.3x11 |
| 22 | 220 | - | 5x11 | 5x11 | 5x11 | 5x11 | 5x11 | 6.3x11 | 8x11.5 |
| 33 | 330 | 5x11 | 5x11 | 5x11 | 5x11 | 5x11 | 6.3x11 | 6.3x11 | 10x12.5 |
| 47 | 470 | 5x11 | 5x11 | 5x11 | 5x11 | 6.3x11 | 6.3x11 | 8x11.5 | 10x16 |
| 100 | 101 | 5x11 | 5x11 | 6.3x11 | 6.3x11 | 8x11.5 | 8x11.5 | 10x12.5 | 12.5x20 |
| 220 | 221 | - | 6.3x11 | 8x11.5 | 8x11.5 | 10x12.5 | 10x16 | 10x20 | 16x25 |
| 330 | 331 | 6.3x11 | - | 8x11.5 | 10x12.5 | 10x16 | 10x20 | 12.5x20 | 16x25 |
| 470 | 471 | 8x11.5 | 8x11.5 | 10x12.5 | 10x16 | 10x20 | 12.5x20 | 12.5x25 | 16x31.5 |
| 1,000 | 102 | 10x12.5 | 10x16 | 10x20 | 12.5x20 | 12.5x25 | 16x25 | 16x31.5 | - |
| 2,200 | 222 | 12.5x20 | 12.5x20 | 12.5x25 | 16x25 | 16x31 | 18x35.5 | - | - |
| 3,300 | 332 | 12.5x20 | 12.5x25 | 16x25 | 16x31 | 18x35.5 | - | - | - |
| 4,700 | 472 | 16x25 | 16x25 | 16x31.5 | 18x35.5 | - | - | - | - |
| 6,800 | 682 | 16x25 | 16x31 | 18x35.5 | - | - | - | - | - |
| 10,000 | 103 | 16x31 | 18x36 | - | - | - | - | - | - |

LEAD SPACING AND DIAMETER (mm)

| Case Dia. (Dφ) | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 |
|------------------|-----|-----|-----|-----|------|-----|-----|
| Lead Dia. (Dφ) | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 |
| Lead Spacing (F) | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| Dim. α | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |

Drawing is representative of parts as supplied in bulk or straight lead format, please see taping specification for details on taped format packaging.

DIMENSIONS (mm)



$$\beta = L < 20\text{mm} = 1.5\text{mm}, L \geq 20\text{mm} = 2.0\text{mm}$$



STANDARD VALUES, SPECIFICATIONS AND CASE SIZES (mm)

| Part Number | Cap. (μF) | W.V. (Vdc) | Dissipation Factor +20°C/120Hz | Ripple Current Rating (mA) +105°C/120Hz | Max. ESR (Ω) +20°C/120Hz | Load Life Hours @+105°C |
|----------------------|-----------|------------|--------------------------------|---|--------------------------|-------------------------|
| NRWA330M6.3V5x11F | 33 | 6.3 | 0.22 | 47 | 11.1 | 1,000 |
| NRWA470M6.3V5x11F | 47 | | 0.22 | 57 | 7.8 | 1,000 |
| NRWA101M6.3V5x11F | 100 | | 0.22 | 82 | 3.7 | 1,000 |
| NRWA331M6.3V6.3x11F | 330 | | 0.22 | 170 | 1.11 | 1,000 |
| NRWA471M6.3V8x11.5F | 470 | | 0.22 | 230 | 0.78 | 1,000 |
| NRWA102M6.3V10x12.5F | 1,000 | | 0.22 | 400 | 0.36 | 1,000 |
| NRWA222M6.3V12.5x20F | 2,200 | | 0.24 | 760 | 0.181 | 1,000 |
| NRWA332M6.3V12.5x20F | 3,300 | | 0.26 | 890 | 0.131 | 1,000 |
| NRWA472M6.3V16x25F | 4,700 | | 0.28 | 1230 | 0.099 | 2,000 |
| NRWA682M6.3V16x25F | 6,800 | | 0.32 | 1340 | 0.078 | 2,000 |
| NRWA103M6.3V16x31F | 10,000 | | 0.40 | 1610 | 0.063 | 2,000 |
| NRWA220M10V5x11F | 22 | 10 | 0.19 | 42 | 14.3 | 1,000 |
| NRWA330M10V5x11F | 33 | | 0.19 | 51 | 9.6 | 1,000 |
| NRWA470M10V5x11F | 47 | | 0.19 | 61 | 6.7 | 1,000 |
| NRWA101M10V5x11F | 100 | | 0.19 | 89 | 3.2 | 1,000 |
| NRWA221M10V6.3x11F | 220 | | 0.19 | 150 | 1.43 | 1,000 |
| NRWA471M10V8x11.5F | 470 | | 0.19 | 250 | 0.67 | 1,000 |
| NRWA102M10V10x16F | 1,000 | | 0.19 | 470 | 0.32 | 1,000 |
| NRWA222M10V12.5x20F | 2,200 | | 0.21 | 790 | 0.158 | 1,000 |
| NRWA332M10V12.5x25F | 3,300 | | 0.23 | 1000 | 0.166 | 1,000 |
| NRWA472M10V16x25F | 4,700 | | 0.25 | 1270 | 0.088 | 2,000 |
| NRWA682M10V16x31F | 6,800 | | 0.29 | 1540 | 0.071 | 2,000 |
| NRWA103M10V18x36F | 10,000 | 0.37 | 1770 | 0.058 | 2,000 | |
| NRWA100M16V5x11F | 10 | 16 | 0.16 | 31 | 26.5 | 1,000 |
| NRWA220M16V5x11F | 22 | | 0.16 | 45 | 12.1 | 1,000 |
| NRWA330M16V5x11F | 33 | | 0.16 | 55 | 8.0 | 1,000 |
| NRWA470M16V5x11F | 47 | | 0.16 | 68 | 5.8 | 1,000 |
| NRWA101M16V6.3x11F | 100 | | 0.16 | 110 | 2.7 | 1,000 |
| NRWA221M16V8x11.5F | 220 | | 0.16 | 190 | 1.21 | 1,000 |
| NRWA331M16V8x11.5F | 330 | | 0.16 | 230 | 0.80 | 1,000 |
| NRWA471M16V10x12.5F | 470 | | 0.16 | 320 | 0.66 | 1,000 |
| NRWA102M16V10x20F | 1,000 | | 0.16 | 560 | 0.27 | 1,000 |
| NRWA222M16V12.5x25F | 2,200 | | 0.18 | 950 | 0.136 | 1,000 |
| NRWA332M16V16x25F | 3,300 | | 0.20 | 1220 | 0.101 | 2,000 |
| NRWA472M16V16x31.5F | 4,700 | 0.22 | 1490 | 0.078 | 2,000 | |
| NRWA682M16V18x35.5F | 6,800 | 0.26 | 1770 | 0.063 | 2,000 | |
| NRWA4R7M25V5x11F | 4.7 | 25 | 0.14 | 22 | 49 | 1,000 |
| NRWA100M25V5x11F | 10 | | 0.14 | 33 | 23 | 1,000 |
| NRWA220M25V5x11F | 22 | | 0.14 | 49 | 10.8 | 1,000 |
| NRWA330M25V5x11F | 33 | | 0.14 | 59 | 7.0 | 1,000 |
| NRWA470M25V5x11F | 47 | | 0.14 | 71 | 4.9 | 1,000 |
| NRWA101M25V6.3x11F | 100 | | 0.14 | 120 | 2.3 | 1,000 |
| NRWA221M25V8x11.5F | 220 | | 0.14 | 200 | 1.1 | 1,000 |
| NRWA331M25V10x12.5F | 330 | | 0.14 | 290 | 0.70 | 1,000 |
| NRWA471M25V10x16F | 470 | | 0.14 | 380 | 0.49 | 1,000 |
| NRWA102M25V12.5x20F | 1,000 | | 0.14 | 670 | 0.23 | 1,000 |
| NRWA222M25V16x25F | 2,200 | | 0.16 | 1110 | 0.121 | 2,000 |
| NRWA332M25V16x31F | 3,300 | 0.18 | 1380 | 0.090 | 2,000 | |
| NRWA472M25V18x35.5F | 4,700 | 0.20 | 1670 | 0.071 | 2,000 | |
| NRWA4R7M35V5x11F | 4.7 | 35 | 0.12 | 24 | 42 | 1,000 |
| NRWA100M35V5x11F | 10 | | 0.12 | 35 | 19.9 | 1,000 |
| NRWA220M35V5x11F | 22 | | 0.12 | 52 | 9.0 | 1,000 |
| NRWA330M35V5x11F | 33 | | 0.12 | 64 | 6.0 | 1,000 |
| NRWA470M35V6.3x11F | 47 | | 0.12 | 87 | 4.2 | 1,000 |
| NRWA101M35V8x11.5F | 100 | | 0.12 | 150 | 2.0 | 1,000 |
| NRWA221M35V10x12.5F | 220 | | 0.12 | 260 | 0.90 | 1,000 |
| NRWA331M35V10x16F | 330 | | 0.12 | 350 | 0.60 | 1,000 |
| NRWA471M35V10x20F | 470 | | 0.12 | 450 | 0.42 | 1,000 |
| NRWA102M35V12.5x25F | 1,000 | | 0.12 | 780 | 0.20 | 1,000 |
| NRWA222M35V16x31F | 2,200 | | 0.14 | 1280 | 0.106 | 2,000 |
| NRWA332M35V18x35.5F | 3,300 | 0.16 | 1570 | 0.081 | 2,000 | |



STANDARD VALUES, SPECIFICATIONS AND CASE SIZES (mm)

| Part Number | Cap. (μF) | W.V. (Vdc) | Dissipation Factor +20°C/120Hz | Ripple Current Rating (mA) +105°C/120Hz | Max. ESR (Ω) +20°C/120Hz | Load Life Hours @+105°C | |
|----------------------|-----------|------------|--------------------------------|---|--------------------------|-------------------------|-------|
| NRWAR47M50V5x11F | 0.47 | 50 | 0.10 | 8.3 | 353 | 1,000 | |
| NRWA1R0M50V5x11F | 1.0 | | 0.10 | 12 | 168 | 1,000 | |
| NRWA2R2M50V5x11F | 2.2 | | 0.10 | 18 | 75 | 1,000 | |
| NRWA3R3M50V5x11F | 3.3 | | 0.10 | 22 | 50 | 1,000 | |
| NRWA4R7M50V5x11F | 4.7 | | 0.10 | 26 | 35 | 1,000 | |
| NRWA100M50V5x11F | 10 | | 0.10 | 38 | 16.6 | 1,000 | |
| NRWA220M50V5x11F | 22 | | 0.10 | 57 | 7.5 | 1,000 | |
| NRWA330M50V6.3x11F | 33 | | 0.10 | 80 | 5.0 | 1,000 | |
| NRWA470M50V6.3x11F | 47 | | 0.10 | 96 | 3.5 | 1,000 | |
| NRWA101M50V8x11.5F | 100 | | 0.10 | 160 | 1.66 | 1,000 | |
| NRWA221M50V10x16F | 220 | | 0.10 | 310 | 0.75 | 1,000 | |
| NRWA331M50V10x20F | 330 | | 0.10 | 410 | 0.50 | 1,000 | |
| NRWA471M50V12.5x20F | 470 | | 0.10 | 540 | 0.35 | 1,000 | |
| NRWA102M50V16x25F | 1,000 | | 0.10 | 950 | 0.166 | 2,000 | |
| NRWA222M50V18x36F | 2,200 | | 0.12 | 1480 | 0.091 | 2,000 | |
| NRWA3R3M63V5x11F | 3.3 | 63 | 0.09 | 23 | 40 | 1,000 | |
| NRWA4R7M63V5x11F | 4.7 | | 0.09 | 28 | 32 | 1,000 | |
| NRWA100M63V5x11F | 10 | | 0.09 | 41 | 15.0 | 1,000 | |
| NRWA220M63V6.3x11F | 22 | | 0.09 | 69 | 6.8 | 1,000 | |
| NRWA330M63V6.3x11F | 33 | | 0.09 | 85 | 4.5 | 1,000 | |
| NRWA470M63V8x11.5F | 47 | | 0.09 | 120 | 3.2 | 1,000 | |
| NRWA101M63V10x12.5F | 100 | | 0.09 | 200 | 1.49 | 1,000 | |
| NRWA221M63V10x20F | 220 | | 0.09 | 350 | 0.68 | 1,000 | |
| NRWA331M63V12.5x20F | 330 | | 0.09 | 480 | 0.45 | 1,000 | |
| NRWA471M63V12.5x25F | 470 | | 0.09 | 620 | 0.32 | 1,000 | |
| NRWA102M63V16x31.5F | 1,000 | | 0.09 | 1080 | 0.149 | 2,000 | |
| NRWAR47M100V5x11F | 0.47 | | 100 | 0.08 | 8.8 | 282 | 1,000 |
| NRWA1R0M100V5x11F | 1.0 | | | 0.08 | 13 | 133 | 1,000 |
| NRWA2R2M100V5x11F | 2.2 | | | 0.08 | 19 | 60 | 1,000 |
| NRWA3R3M100V5x11F | 3.3 | | | 0.08 | 23 | 40 | 1,000 |
| NRWA4R7M100V5x11F | 4.7 | 0.08 | | 30 | 28 | 1,000 | |
| NRWA100M100V6.3x11F | 10 | 0.08 | | 49 | 13.3 | 1,000 | |
| NRWA220M100V8x11.5F | 22 | 0.08 | | 84 | 6.0 | 1,000 | |
| NRWA330M100V10x12.5F | 33 | 0.08 | | 120 | 4.0 | 1,000 | |
| NRWA470M100V10x16F | 47 | 0.08 | | 160 | 2.8 | 1,000 | |
| NRWA101M100V12.5x20F | 100 | 0.08 | | 280 | 1.33 | 1,000 | |
| NRWA221M100V16x25F | 220 | 0.08 | | 500 | 0.60 | 2,000 | |
| NRWA331M100V16x25F | 330 | 0.08 | | 610 | 0.40 | 2,000 | |
| NRWA471M100V16x31.5F | 470 | 0.08 | | 780 | 0.28 | 2,000 | |

RIPPLE CURRENT CORRECTION FACTOR

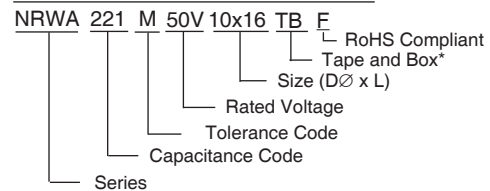
1. Temperature Factor

| Ambient Temperature (°C) | ≤+65 | +75 | +85 | +105 |
|--------------------------|------|------|-----|------|
| Correction Factor | 0.45 | 0.75 | 0.9 | 1.0 |

2. Frequency Factor

| Frequency (Hz) | 50 | 120 | 300 | 1K | 10K | 100K |
|----------------|------|------|------|------|------|------|
| 0.47 ~ 3.3μF | 0.65 | 1.00 | 1.35 | 1.75 | 2.30 | 2.50 |
| 4.7 ~ 33μF | 0.75 | 1.00 | 1.25 | 1.50 | 1.75 | 1.80 |
| 47 ~ 1000μF | 0.80 | 1.00 | 1.15 | 1.30 | 1.40 | 1.50 |
| 2200 ~ 10000μF | 0.85 | 1.00 | 1.03 | 1.05 | 1.08 | 1.08 |

PART NUMBERING SYSTEM



*see tape specification for details

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



Miniature Aluminum Electrolytic Capacitors Taping Specifications

STANDARD RADIAL TAPING (5mm LEAD SPACING, FORMED LEADS) TB

Taping Dimensions (mm)

| Case Dia. (D ϕ) | 4 | 5 | 6.3 | 8 |
|-----------------------|------------------------------------|------------|------|------------------------------------|
| Case Size | 4x5 4x7 | 5x5 5x7 | 5x11 | 6.3x5 6.3x7 6.3x11 8x11.5 |
| d ϕ \pm 0.05 | 0.45 | 0.45 | 0.5 | 0.45 |
| H \pm 0.75 | 17.5 | 17.5 | 18.5 | 17.5 |
| F +0.8 ~ -0.2 | 5.0 -0.2 ~ +0.8 | | | |
| P | 12.7 \pm 1.0 | | | |
| P ₀ | 12.7 \pm 0.2 | | | |
| P ₁ | 3.85 \pm 0.5 (at end of tape) | | | |
| P ₂ | 6.35 \pm 1.0 | | | |
| W | 18.0 \pm 0.5 | | | |
| W ₀ | 11.5 min. | | | |
| W ₁ | 9.0 \pm 0.5 | | | |
| W ₂ | 0 ~ 2.5 | | | |
| H ₀ | 16.0 \pm 0.5 | | | |
| l | 1.0 max. | | | |
| D ₀ ϕ | 4.0 \pm 0.2 | | | |
| Δ h | 0 \pm 1.0 (at top of can) | | | |
| t | 0.7 \pm 0.2 (not including lead) | | | |



STANDARD RADIAL TAPING (5mm LEAD SPACING, STRAIGHT LEADS) TB

Taping Dimensions (mm)

| Case Dia. (D ϕ) | 10 | 12.5 |
|-----------------------|------------------------------------|------|
| Case Size | All | All |
| d ϕ \pm 0.05 | 0.6 | 0.6 |
| H \pm 0.75 | 19.0 | 19.0 |
| F +0.8 ~ -0.2 | 5.0 | 5.0 |
| P \pm 1.0 | 25.4* | |
| P ₀ | 12.7 \pm 0.2 | |
| P ₁ | 3.85 | |
| P ₂ | 6.35 \pm 1.0 | |
| W | 18.0 \pm 0.5 | |
| W ₀ | 11.5 min | |
| W ₁ | 9.0 \pm 0.5 | |
| W ₂ | 0 ~ 2.5 | |
| H ₀ | 16.0 \pm 0.5 | |
| l | 1.0 max. | |
| D ₀ ϕ | 4.0 \pm 0.2 | |
| Δ h | 0 \pm 1.0 (at top of can) | |
| t | 0.7 \pm 0.2 (not including lead) | |



*Optional Taping Specifications

10mm diameter available with P dim. = 12.7mm
(P/N Suffix: TB12.7MMP)

12.5mm diameter available with P dim. = 15mm, P₁ = 5.0mm,
P₀ = 15.0mm & P₂ = 7.5mm (P/N Suffix: TB15MMP)

NOTE: ANODE (+) LEAD FEEDS OFF FIRST.
FOR OPTION OF NEGATIVE (-) LEAD FIRST,
SPECIFY "TBN".

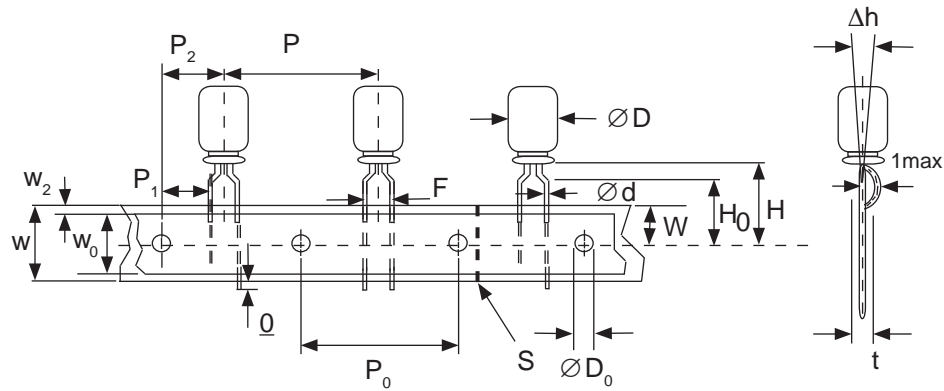


Miniature Aluminum Electrolytic Capacitors Taping Specifications

SPECIAL RADIAL TAPING (2.5mm LEAD SPACING, FORMED LEADS) TBF1

Taping Dimensions (mm)

| Case Dia. (D ϕ) | 4 | 5 | |
|--------------------------|-----------------|------------|------|
| Case Size Dim. | 4x5 4x7 | 5x5 5x7 | 5x11 |
| d ϕ \pm 0.05 | 0.45 | 0.45 | 0.5 |
| H \pm 0.75 | 17.5 | 17.5 | 18.5 |
| H ₀ \pm 0.5 | 16.0 | - | - |
| F | 2.5 -0.2 ~ +0.8 | | |
| P | 12.7 \pm 1.0 | | |
| P ₀ | 12.7 \pm 0.2 | | |
| P ₁ | 5.1 \pm 0.5 | | |
| P ₂ | 6.35 \pm 1.0 | | |
| W | 18.0 \pm 0.5 | | |
| W ₀ | 11.5 min. | | |
| W ₁ | 9.0 \pm 0.5 | | |
| W ₂ | 0 ~ 1.5 | | |
| l | 1.0 max. | | |
| D ₀ ϕ | 4.0 \pm 0.2 | | |
| Δ h | 0 \pm 1.0 | | |
| t | 0.7 \pm 0.2 | | |

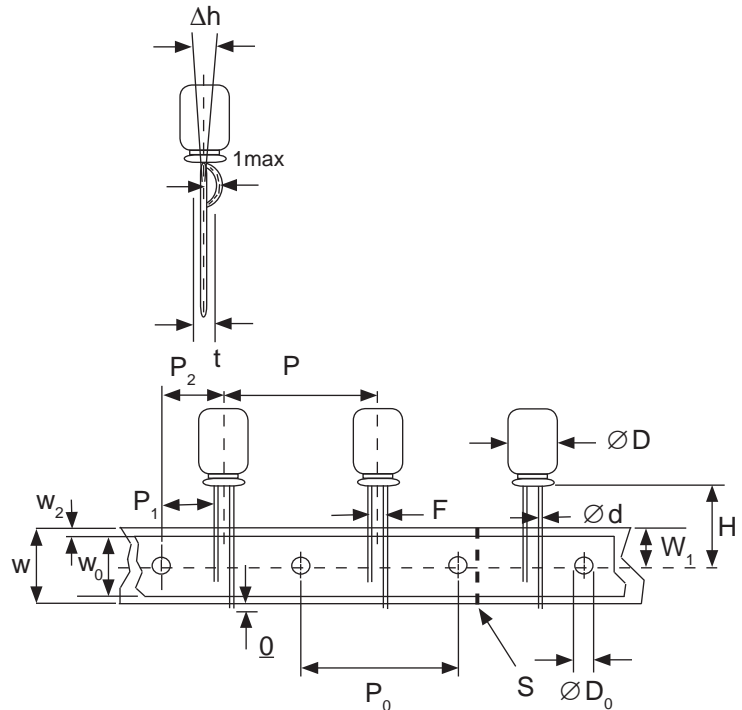


SPECIAL STRAIGHT LEAD TAPING TBST

Taping Dimensions (mm)

| Case Dia. (D ϕ) | 4 | 5 | | | 6.3 | | 8 |
|-----------------------|------------------------------------|------------|------|----------------|--------|--------|---|
| Case Size Dim. | 4x5 4x7 | 5x5 5x7 | 5x11 | 6.3x5 6.3x7 | 6.3x11 | 8x11.5 | |
| d ϕ \pm 0.05 | 0.45 | 0.45 | 0.5 | 0.45 | 0.5 | 0.6 | |
| H \pm 0.75 | 17.5 | 17.5 | 18.5 | 17.5 | 18.5 | 20.0 | |
| F +0.8 ~ -0.2 | 2.0* | 2.0 | 2.0 | 2.5 | 2.5 | 3.5 | |
| P \pm 1.0 | 12.7 \pm 0.2 | | | | | | |
| P ₀ | 12.7 \pm 0.2 | | | | | | |
| P ₁ | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 4.6 | |
| P ₂ | 6.35 \pm 1.0 | | | | | | |
| W | 18.0 \pm 0.5 | | | | | | |
| W ₀ | 11.5 min. | | | | | | |
| W ₁ | 9.0 \pm 0.5 | | | | | | |
| W ₂ | 0 ~ 2.5 | | | | | | |
| H ₀ | 16.0 \pm 0.5 | | | | | | |
| l | 1.0 max. | | | | | | |
| D ₀ ϕ | 4.0 \pm 0.2 | | | | | | |
| Δ h | 0 \pm 1.0 (at top of can) | | | | | | |
| t | 0.7 \pm 0.2 (not including lead) | | | | | | |

* Parts with 4mm diameter are taped with a slight flare in the lead and a 2.0mm lead-space.



RADIAL TAPED PACKAGING



Ammo Box (Tape & Box) TB, TBF1, TBST

Size of box and component quantity

| Case Dia (D ϕ) or Case Size | Q'ty per Box (pcs) | Dim. L | Dim. H | Dim. W |
|-----------------------------------|--------------------|--------|--------|--------|
| 4x5, 4x7 | 2,000 | 331 | 175 | 43 |
| 5x5, 5x7 | 2,000 | 331 | 220 | 43 |
| 5x11 | 2,000 | 340 | 255 | 55 |
| 6.3x5, 6.3x7 | 2,000 | 331 | 280 | 43 |
| 6.3x11 | 2,000 | 331 | 280 | 48 |
| 8x11.5, 8x12.5 | 1,000 | 335 | 235 | 53 |
| 10x12.5* | 500 | 335 | 190 | 53 |
| 10x16* | 500 | 335 | 300 | 53 |
| 10x20* | 500 | 335 | 300 | 55 |
| 12.x20* | 500 | 335 | 300 | 55 |
| 12.5x25* | 500 | 335 | 300 | 61 |

*Special Taping Consult Factory For Availability