www.niccomp.com/pcn | Technical Support:



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Issued: February 7th, 2023 SUB: EOL Notice Product Type: Surface Mount Polymer Tantalum Capacitors NIC Series: NTPG Series Product Specification: http://www.niccomp.com/products/catalog/ntpg.pdf

Notification: End of Life Notification

The following is notice of the end of life for NTPG series part numbers.

Effective: February 7th, 2023 Last Order Date: August 7th, 2023 for establish customers with existing business Last Ship Date: February 7th, 2024 for established customers with existing business

Reason for Discontinuation: Low Demand Link to List of Part Numbers (Excel)

| EOL Part Number | OL Part Number Capacitance | | Possible Alternative | Comment |
|--------------------|----------------------------|------|----------------------|--------------------------------|
| NTPG227M2.5B3(30)F | 220 | 2.5 | NTP227M2.5TRB(45)F | Higher Profile |
| NTPG227M2.5B2(70)F | 220 | 2.5 | NTP227M2.5TRB(45)F | Higher Profile |
| NTPG227M4B3(70)F | 220 | 4 | NTP227M4TRB(45)F | Higher Profile |
| NTPG107M6.3B2(55)F | 100 | 6.3 | NTP107M6.3TRB(45)F | Higher Profile |
| NTPG107M6.3B2(70)F | 100 | 6.3 | NTP107M6.3TRB(70)F | Higher Profile |
| NTPG157M6.3B3(35)F | 150 | 6.3 | NTP157M6.3TRB(35)F | Higher Profile |
| NTPG157M6.3B3(70)F | 150 | 6.3 | NTP157M6.3TRB3(70)F | Higher Profile |
| NTPG476M8B2(70)F | 47 | 8 | NTP476M10TRB(70)F | Higher Profile, Higher Voltage |
| NTPG476M10B2(70)F | 47 | 10 | NTP476M10TRB(70)F | Higher Profile |
| NTPG336M12B2(70)F | 33 | 12.5 | N/A | |

Prepared by: Technical Product Marketing Group / tpmg@niccomp.com →Follow NIC PCN alerts to get email notifications of EOL and PCN announcements at www.niccomp.com/pcn

Use our Quickbuilder tool to find possible alternatives for the discontinued parts: http://www.niccomp.com/QuickBUILDER/gb_capacitor.php

Surface Mount Polymer-Tantalum Capacitor

NTPG Series

FEATURES

- Values from 33μF to 220μF
- Low Profile (1.1mm ~ 1.4mm)
- B Case Size (3.5mm x 2.8mm)

CHARACTERISTICS



| Capacitance Range | 33µF to 220µF | | | |
|---|---|--|--|--|
| Capacitance Tolerance | ±20% (M) | | | |
| Rated Voltage Range @ 85°C (Vdc) | 2.5Vdc ~ 12.5Vdc | | | |
| Operating Temperature Range | -55°C ~ +105°C (voltage derating above +85°C, see specifications table) | | | |
| Dissipation Factor | | | | |
| Leakage Current @ +25°C (After 5 Minutes at Rated Voltage) | See Specifications Table | | | |
| Capacitance Change | -55°C | | | |
| With Temperature | ∆C ±20% | | | |
| Resistance to Soldering Heat (+260°C for 5 Seconds) | Δ C ± 10% of intial measured value LC = Less than 300% of specified max. value DF less than 200% of specified max. value | | | |
| Moisture Resistance (500 hours; 90~95% RH @ +60°C) | Δ C -20% ~ +40% Max, LC = <300% of specified max. value DF = 150% of specified max. value | | | |
| Load Life at Rated Voltage (1,000 hours @ 85°C) | Δ C ±20% initial measure value, LC = Less than specified max. value DF = 150% of specified max. value | | | |
| Base Failure Rate | 1%/1000 hours at +85°C and rated voltage | | | |

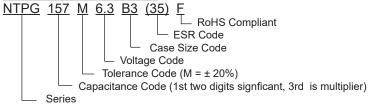
* Parts with rated voltage \leq 8V recommended derating is 90% of the rated voltage.

For parts with rated voltage >8V recommended derating is 80% of the rated voltage.

STANDARD VALUES AND CASE SIZES

| Rated Voltage @ | Rated Voltage @ +85°C | | 4.0 | 6.3 | 8 | 10 | 12.5 |
|-------------------------|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Surge Voltage @ +85°C | | 2.9 | 4.6 | 7.2 | 9.2 | 12 | 14 |
| Derated Voltage @ 105°C | | 2.0 | 3.2 | 5.0 | 6.3 | 8 | 10 |
| Capacitance (µF) | Code | Case Size |
| 33 | 336 | - | - | - | - | - | B2 |
| 47 | 476 | - | - | - | B2 | B2 | - |
| 100 | 107 | - | - | B2 | - | - | - |
| 150 | 157 | - | - | B3 | - | - | - |
| 220 | 227 | B3, B2 | B3 | - | - | - | - |





PRECAUTIONS

Please review the notes on correct use, safety and precautions found at https://www.niccomp.com/resource/files/aluminum/AlumAppIInfoCautions.pdf If in doubt or uncertainty, please review your specific application - process details with NIC's technical support personnel: tpmg@niccomp.com

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www.niccomp.com SPECIFICATIONS ARE SUBJECT TO CHANGE

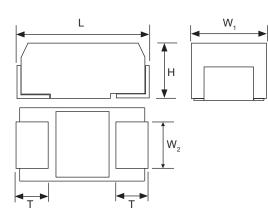
Surface Mount Polymer-Tantalum Capacitor

STANDARD PART NUMBERS AND SPECIFICATIONS

| NIC Part Number | | | Rated Voltage Derated for | Dissipation Factor | ESR (mΩ) @+20°C | Max. LC (μA) | Ripple Current Rating (mA) 100KHz ~ 500KHz | | | |
|--------------------|------|----------------|------------------------------|-----------------------|--------------------|-----------------|--|----------------------------|--|-----|
| NIC Fait Number | (μF) | (Vdc) +85°C | Operation >+85°C (Vdc) | @ +20°C & 120Hz | & 100KHz | after 5 min. | <u>≤</u> +45°C | >+45°C ~ <u><</u> +85°C | >+85°C ~ <u><</u> +105°C (with >+85°C voltage derating) | |
| NTPG227M2.5B2(70)F | 220 | 2.5 | 2.0 | 0.10 | 70 | 55 | 1,000 | 700 | 250 | |
| NTPG227M2.5B3(30)F | 220 | 2.5 | 2.0 | 0.10 | 30/300KHz | 110 | 1,400 | 980 | 350 | |
| NTPG227M4B3(70)F | 220 | 4.0 | 3.2 | 0.10 | 70 | 88 | 1,000 | 700 | 250 | |
| NTPG107M6.3B2(70)F | 100 | | | | 0.10 | 70 | 63 | 1,000 | 700 | 250 |
| NTPG107M6.3B2(55)F | 100 | 6.3 | 5.0 | 0.10 | 55 | 63 | 1,100 | 770 | 275 | |
| NTPG157M6.3B3(70)F | 150 | 0.3 | 5.0 | 0.10 | 70 | 94.5 | 1,000 | 700 | 250 | |
| NTPG157M6.3B3(35)F | 150 | | | 0.10 | 35/300KHz | 189 | 1,200 | 840 | 300 | |
| NTPG476M8B2(70)F | 47 | 8.0 | 6.3 | 0.10 | 70 | 37.6 | 1,000 | 700 | 250 | |
| NTPG476M10B2(70F | 47 | 10 | 8.0 | 0.10 | 70 | 47 | 1,000 | 700 | 250 | |
| NTPG336M12B2(70)F | 33 | 12.5 | 10 | 0.10 | 70 | 41.3 | 1,000 | 700 | 250 | |

CASE DIMENSIONS (mm)

| Case Size | L | Н | W ₁ | W_2 | Т |
|-----------|---------------|-----------|----------------|-----------|-----------|
| B2 | 3.5 +0.3/-0.1 | 1.1 ± 0.1 | 2.8 +0.3/-0.1 | 2.2 ± 0.1 | 0.8 ± 0.2 |
| B3 | 3.5 +0.3/-0.1 | 1.4 ± 0.1 | 2.8 +0.3/-0.1 | 2.2 ± 0.1 | 0.8 ± 0.2 |



VOLTAGE CODES

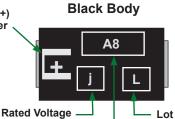
| е | g | j | k | А | В |
|------|------|------|------|-----|-------|
| 2.5V | 4.0V | 6.3V | 8.0V | 10V | 12.5V |

CAPACITANCE CODES

| N7 | S7 | A8 | E8 | J8 |
|------|------|-------|-------|-------|
| 33µF | 47μF | 100µF | 150μF | 220µF |



Code

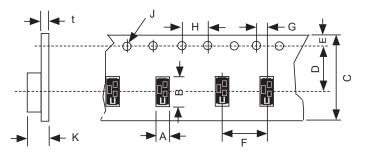


Capacitance Code

Code

TAPE SPECIFICATIONS (mm)

| | | | | , | | | | | | | | |
|--------|------|------|------|------|------|------|------|------|------|------|------|------------|
| Case | A | В | С | D | E | F | G | Н | J | K | t | Reel Qty |
| Size | ±0.1 | ±0.1 | ±0.3 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | +0.1 | ±0.2 | ±0.1 | 180mm Reel |
| B3, B2 | 3.25 | 3.90 | 8.0 | 3.5 | 1.75 | 4.0 | 2.0 | 4.0 | φ1.5 | 1.7 | 0.25 | 2,500 |

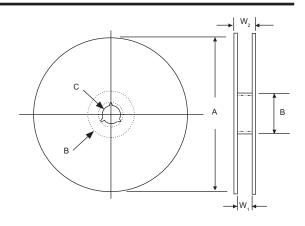




Surface Mount Polymer-Tantalum Capacitor

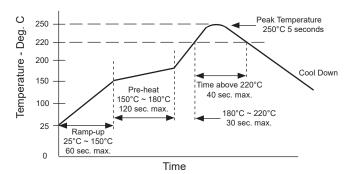
REEL SPECIFICATIONS (mm)

| Tape Width | A +0.0/-3.0 | B ± 2.0 | C ± 0.2 | W ₁ ± 0.5 | W ₂ ± 1.0 |
|---------------|-------------|------------|--------------|----------------------|----------------------|
| 8mm | φ180 | φ60 | φ 1 3 | 9.0 | 11.4 |

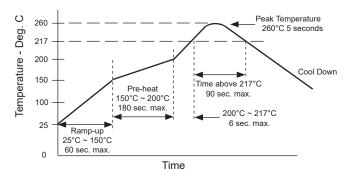


MAXIMUM OF 2 REFLOW PASSES UNDER BELOW CONDITIONS

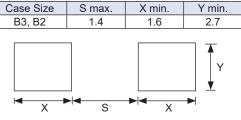
250°C REFLOW TEMPERATURES/DURATIONS



260°C REFLOW TEMPERATURES/DURATIONS



RECOMMENDED LAND PATTERN (mm)



1. NTPG parts are moisture sensitive (MSL 3) and are shipped in moisture control bags. After opening the bag capacitors should be stored \leq 30°C, relative humidity of \leq 60% maximum and soldered within 168 hours.

250°C & 260°C PEAK REFLOW TEMPERATURE

| Case Size | Time | Conditions | MSL |
|-----------|-----------|--------------|-----|
| All Sizes | 168 hours | <30°C/60% RH | 3 |

2. The parts should be soldered using the minimum amount of heat required.

