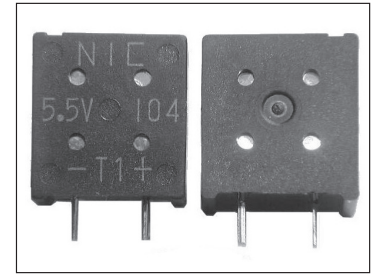


FEATURES

- DOUBLE LAYER CONSTRUCTION
- POWER BACK-UP FOR CMOS RAM (UP TO 50 μ A DISCHARGE CURRENT)
- TAPE AND BOX PACKAGING
- SUITABLE FOR FLOW SOLDERING
- UL94V-0 MOLDED CASE
- LEAD-FREE FINISH

RoHS Compliant
includes all homogeneous materials

*See Part Number System for Details



CHARACTERISTICS

| Rated Voltage Range | 3.5 ~ 6.5VDC | |
|--|--|---|
| Rated Capacitance Range | 0.01F ~ 0.22F (10,000 μ F ~ 220,000 μ F) | |
| Operating Temp. Range | -25°C ~ +70°C | |
| Capacitance Tolerance | +80%/-20% (Z) | |
| Load Life Test @ 70°C 1,000 hours | Δ Capacitance Change | Less than \pm 30% of initial measured value |
| | Maximum ESR | Less than 200% of the specified maximum value |
| | Current at 30 minutes | Less than 200% of the specified maximum value |
| Temperature Cycling (5 cycles, -25 ~ +70°C) | Δ Capacitance Change | Within +80%/-20% of specified value |
| | Maximum ESR | Less than specified maximum value |
| | Current at 30 minutes | Less than specified maximum value |
| Humidity Resistance (240 hours @ 40°C/90% RH) | Δ Capacitance Change | Less than \pm 20% of initial measured value |
| | Maximum ESR | Less than 120% of the specified maximum value |
| | Current at 30 minutes | Less than 120% of the specified maximum value |

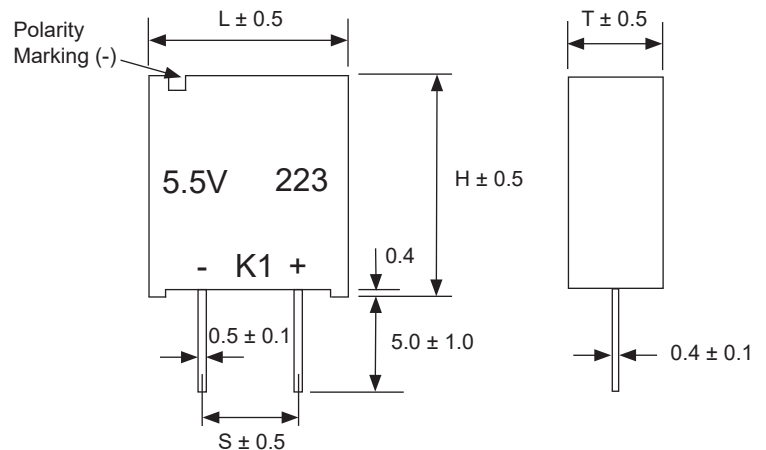
Super Capacitor
Application Guide

STANDARD VALUES AND SPECIFICATIONS

| NIC P/N | Capacitance Value (F) | | Rated Voltage (VDC) | Max. Current @ 30 minutes (mA) | Max. ESR @ 1KHz (Ω) |
|-------------------------|-----------------------|-----------|---------------------|--------------------------------|------------------------------|
| | Charge | Discharge | | | |
| NEXM473Z3.5V10.5X5TBF | 0.047 | 0.060 | 3.5 | 0.042 | 200 |
| NEXM104Z3.5V10.5X5TBF | 0.100 | 0.130 | 3.5 | 0.090 | 100 |
| NEXM224Z3.5V10.5X6.5TBF | 0.220 | 0.300 | 3.5 | 0.200 | 100 |
| NEXM103Z5.5V10.5X5TBF | 0.010 | 0.014 | 5.5 | 0.015 | 300 |
| NEXM223Z5.5V10.5X5TBF | 0.022 | 0.028 | 5.5 | 0.033 | 200 |
| NEXM473Z5.5V10.5X5TBF | 0.047 | 0.060 | 5.5 | 0.071 | 200 |
| NEXM104Z5.5V10.5X6.5TBF | 0.100 | 0.130 | 5.5 | 0.150 | 100 |
| NEXM224Z5.5V10.5X6.5TBF | - | 0.220 | 5.5 | 0.330 | 100 |
| NEXM473Z6.5V10.5X6.5TBF | 0.047 | 0.062 | 6.5 | 0.085 | 200 |

CASE DIMENSIONS (mm)

| NIC P/N | DIMENSIONS (mm) | | | |
|-------------------------|-----------------|------|-----|-----|
| | L | H | S | T |
| NEXM473Z3.5V10.5X5TBF | 10.5 | 11.5 | 5.0 | 5.0 |
| NEXM104Z3.5V10.5X5TBF | | | | 5.0 |
| NEXM224Z3.5V10.5X6.5TBF | | | | 6.5 |
| NEXM103Z5.5V10.5X5TBF | | | | 5.0 |
| NEXM223Z5.5V10.5X5TBF | | | | 5.0 |
| NEXM473Z5.5V10.5X5TBF | | | | 5.0 |
| NEXM104Z5.5V10.5X6.5TBF | | | | 6.5 |
| NEXM224Z5.5V10.5X6.5TBF | | | | 6.5 |
| NEXM473Z6.5V10.5X6.5TBF | | | | 6.5 |

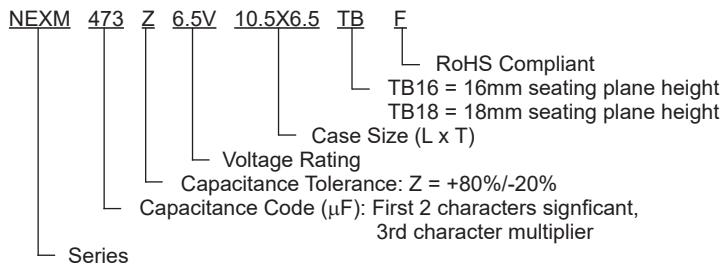


PRECAUTIONS

Please review the notes on correct use, safety and precautions found at https://www.nicomp.com/resource/files/double/Double_Layer_Capacitor_Guide_0810-RevBrA7.pdf
If in doubt or uncertainty, please review your specific application - process details with NIC's technical support personnel: tpmg@nicomp.com



PART NUMBERING SYSTEM



TAPING SPECIFICATIONS (mm)

| a | b | c | W ₄ | t ₃ | P | P ₀ | P ₁ | P ₂ | F | Δh | W | W ₀ | W ₁ | W ₂ | H | D ₀ | t ₁ | t ₂ | L |
|------|------|------|----------------|----------------|------|----------------|----------------|----------------|------|------|--------------------|----------------|----------------|----------------|-------|----------------|----------------|----------------|------|
| ±0.5 | ±0.5 | ±0.5 | ±0.1 | ±0.1 | ±1.0 | ±0.3 | ±0.7 | ±1.3 | ±0.5 | max. | ^{+1/-0.5} | min. | ±0.5 | max. | ±0.5 | ±0.2 | ±0.2 | max. | max. |
| 11.5 | 10.5 | - | 0.5 | 0.4 | 12.7 | 12.7 | 3.85 | 6.35 | 5.0 | 2.0 | 18 | 12.5 | 9.0 | 3.0 | 16/18 | φ4.0 | 0.7 | 1.5 | 11.0 |

