

FEATURES

- DOUBLE LAYER CONSTRUCTION
- LOW ESR
- SUITABLE FOR FLOW SOLDERING
- LEAD-FREE FINISH

**RoHS
Compliant**
includes all homogeneous materials

*See Part Number System for Details



CHARACTERISTICS

| | | |
|--|--|---|
| Rated Voltage Range | 5.5VDC | |
| Rated Capacitance Range | 0.047F ~ 1.0F (47,000μF ~ 1,000,000μF) | |
| 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 ±30% of initial measured value |
| | Maximum ESR | Less than 400% of the specified maximum value |
| Temperature Characteristics -25°C & +70°C | Δ Capacitance Change | Within +30% of 20°C value |
| | Maximum ESR | Less than 5x 20°C value |
| Shelf Life @ +70°C (1,000 hours) | Δ Capacitance Change | Less than ±30% of initial measured value |
| | Maximum ESR | Less than 400% of the specified maximum value |

**Super Capacitor
Application Guide**

STANDARD VALUES AND SPECIFICATIONS

| NIC P/N | Case Size (mm) | Capacitance (F) | Holding Voltage (VDC min.)* | Max. Leakage Current @ minutes (μA) | Max. ESR @ 1KHz (Ω) |
|------------------------|----------------|-----------------|-----------------------------|-------------------------------------|---------------------|
| NEZBN473Z5.5V13.5X7.5F | 13.5X7.5 | 0.047 | 4.0 | 69 @ 30 minutes | 25 |
| NEZBN104Z5.5V13.5X7.5F | 13.5X7.5 | 0.1 | 4.0 | 100 @ 30 minutes | 25 |
| NEZBN224Z5.5V13.5X7.5F | 13.5X7.5 | 0.22 | 4.0 | 135 @ 30 minutes | 25 |
| NEZBN334Z5.5V13.5X7.5F | 13.5X7.5 | 0.33 | 4.0 | 182 @ 30 minutes | 25 |
| NEZBN474Z5.5V21.5X8F | 21.5X8 | 0.47 | 4.0 | 216 @ 30 minutes | 20 |
| NEZBN105Z5.5V21.5X8F | 21.5X8 | 1.0 | 4.0 | 315 @ 30 minutes | 20 |

*Minimum voltage at 24 hours after charging for 1 hour at 5VDC.

PART NUMBER SYSTEM

NEZBN 474 Z 5.5V 21.5x8 F

Series Capacitance Code in μF, first 2 digits are significant, third digit is no. of zeros Tolerance Code Z = +80%/-20% Working Voltage Size in mm RoHS Compliant

PRECAUTIONS

WASHING is NOT RECOMMENDED. Additional guidelines and precautions can be 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



CASE DIMENSIONS (mm)

| NIC P/N | DIMENSIONS (mm) | | | | | |
|------------------------|-----------------|--------|-------------|-------------|--------------------------|--------------------------|
| | D max. | H max. | S \pm 0.3 | L \pm 1.0 | d ₁ \pm 0.1 | d ₂ \pm 0.1 |
| NEZBN473Z5.5V13.5X7.5F | 13.5 | 7.5 | 5.0 | 6.0 | 1.2 | 0.5 |
| NEZBN104Z5.5V13.5X7.5F | 13.5 | 7.5 | 5.0 | 6.0 | 1.2 | 0.5 |
| NEZBN224Z5.5V13.5X7.5F | 13.5 | 7.5 | 5.0 | 6.0 | 1.2 | 0.5 |
| NEZBN334Z5.5V13.5X7.5F | 13.5 | 7.5 | 5.0 | 6.0 | 1.2 | 0.5 |
| NEZBN474Z5.5V21.5X8F | 21.5 | 8.0 | 5.0 | 6.0 | 1.2 | 0.5 |
| NEZBN105Z5.5V21.5X8F | 21.5 | 8.0 | 5.0 | 6.0 | 1.2 | 0.5 |

