

FEATURES

- SMALLER THAN NEXA SERIES
- DOUBLE LAYER CONSTRUCTION
- SHORT TERM POWER SOURCE (UP TO 50mA)
- 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 | 0.1F ~ 5.6F (100,000μF ~ 5,600,000μF) | |
| Operating Temp. Range | -40°C ~ +85°C | |
| Capacitance Tolerance | +80%/-20% (Z) | |
| Load Life Test @ 85°C 1,000 hours | Δ Capacitance Change | Less than ±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, -40 ~ +85°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 ±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 |

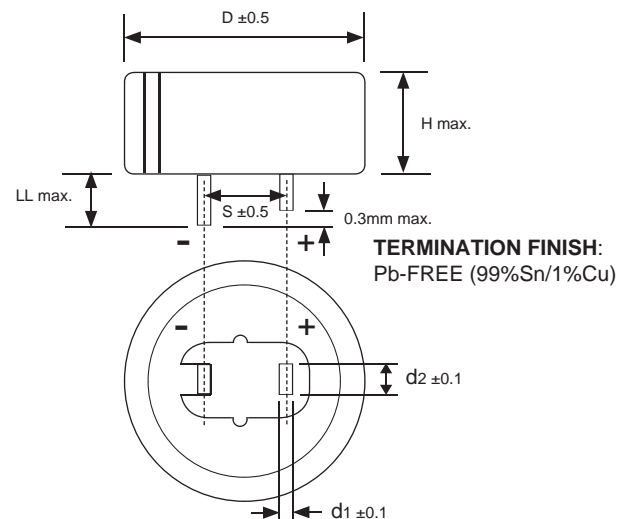
Super Capacitor
Application Guide

STANDARD VALUES AND SPECIFICATIONS

| NIC P/N | Capacitance Value (F) | | Rated Voltage (VDC) | Max. Current @ 30 minutes (mA) | Max. ESR @ 1KHz (Ω) | Typical DCR (Ω) |
|-----------------------|-----------------------|-----------|---------------------|--------------------------------|---------------------|-----------------|
| | Charge | Discharge | | | | |
| NEXT104Z5.5V11.5X8.5F | 0.10 | 0.14 | 5.5 | < 0.15 | <16 | 23 |
| NEXT224Z5.5V14.5X12F | 0.22 | 0.28 | 5.5 | <0.33 | <10 | 16 |
| NEXT474Z5.5V16.5X13F | 0.47 | 0.60 | 5.5 | <0.71 | <6.5 | 5.4 |
| NEXT105Z5.5V21.5X13F | 1.0 | 1.3 | 5.5 | <1.5 | <3.5 | 2.9 |
| NEXT225Z5.5V28.5X14F | 2.2 | 2.8 | 5.5 | <3.3 | <1.8 | 2.1 |
| NEXT335Z5.5V36.5X15F | 3.3 | 4.2 | 5.5 | <5.0 | <1.0 | 1.3 |
| NEXT565Z5.5V44.5X17F | 5.6 | 7.2 | 5.5 | <8.4 | <0.6 | 0.8 |

CASE DIMENSIONS (mm)

| NIC P/N | DIMENSIONS (mm) | | | | | |
|-----------------------|-----------------|------|-------|-----|-----|-----|
| | D | H | S | LL | d1 | d2 |
| NEXT104Z5.5V11.5X8.5F | 11.5 | 8.5 | 5.08 | 2.7 | 0.4 | 1.2 |
| NEXT224Z5.5V14.5X12F | 14.5 | 12.0 | 5.08 | 2.2 | 0.4 | 1.2 |
| NEXT474Z5.5V16.5X13F | 16.5 | 13.0 | 5.08 | 2.7 | 0.4 | 1.2 |
| NEXT105Z5.5V21.5X13F | 21.5 | 13.0 | 7.62 | 3.0 | 0.6 | 1.2 |
| NEXT225Z5.5V28.5X14F | 28.5 | 14.0 | 10.16 | 6.1 | 0.6 | 1.4 |
| NEXT335Z5.5V36.5X15F | 36.5 | 15.0 | 15.0 | 6.1 | 0.6 | 1.7 |
| NEXT565Z5.5V44.5X17F | 44.5 | 17.0 | 20.0 | 6.1 | 1.0 | 1.4 |



PRECAUTIONS

WASHING is NOT RECOMMENDED. Special wash resistant parts are available. Contact NIC for details. 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

