## **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**

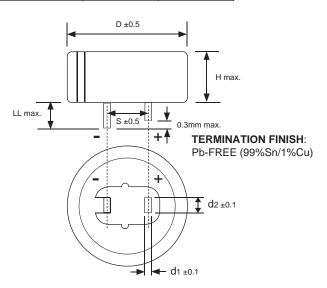
| Rated Voltage Range                              | 5.5VDC                                | Cunar Canacitar                               |  |  |  |
|--|---------------------------------------|---|--|--|--|
| Rated Capacitance Range                          | 0.1F ~ 5.6F (100,000μF ~ 5,600,000μF) | Super Capacitor                               |  |  |  |
| Operating Temp. Range                            | -40°C ~ +85°C                         | Application Guide                             |  |  |  |
| Capacitance Tolerance                            | +80%/-20% (Z)                         |   |  |  |  |
| Load Life Test @ 85°C<br>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<br>(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<br>(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 |  |  |  |

#### STANDARD VALUES AND SPECIFICATIONS

| NIC P/N               | Capacitance Value (F)<br>Charge Discharge |      | Rated Voltage<br>(VDC) | Max. Current @ 30 minutes (mA) | Max. ESR @<br>1KHz (Ω) | Typical DCR (Ω) |
|-----------------------|---|------|------------------------|--------------------------------|------------------------|-----------------|
| 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) |      |       |     |     |                |  |
|-----------------------|-----------------|------|-------|-----|-----|----------------|--|
| NIC F/N               | D               | Н    | S     | LL  | d1  | d <sub>2</sub> |  |
| 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 IN 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



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