

FEATURES

- DOUBLE LAYER CONSTRUCTION
- HIGH CURRENT DISCHARGE (UP TO 500 μ A)
- IDEAL FOR LONG TIME BACK-UP POWER SUPPLY
- SUITABLE FOR FLOW SOLDERING
- LEAD-FREE FINISH

CHARACTERISTICS

| | | |
|--|---|---|
| Rated Voltage Range | 5.5VDC | |
| Rated Capacitance Range | 0.01F ~ 4.7F (10,000 μ F ~ 4,700,000 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 |



STANDARD VALUES AND SPECIFICATIONS

| NIC P/N | Capacitance Value (F) | | Holding Volt- age (VDC min.) | Max. Current @ 30 minutes (mA) | Max. ESR @ 1KHz (Ω) | Typical DCR (Ω) |
|----------------------|-----------------------|-----------|---------------------------------|-----------------------------------|---------------------------------|-----------------------------|
| | Charge | Discharge | | | | |
| NEXG103Z5.5V11X5.5F | 0.01 | 0.013 | 4.2 | 0.015 | 300 | 94 |
| NEXG223Z5.5V11X5.5F | 0.022 | 0.028 | 4.2 | 0.033 | 200 | 31 |
| NEXG473Z5.5V11X5.5F | 0.047 | 0.060 | 4.2 | 0.071 | 200 | 29 |
| NEXG104Z5.5V11X6.5F | 0.10 | 0.13 | 4.2 | 0.15 | 100 | 16 |
| NEXG224Z5.5V13X9F | 0.22 | 0.28 | 4.2 | 0.33 | 100 | 15 |
| NEXG474Z5.5V14.5X18F | 0.47 | 0.60 | 4.2 | 0.71 | 120 | 26 |
| NEXG105Z5.5V16.5X19F | 1.0 | 1.3 | 4.2 | 1.5 | 65 | 14 |
| NEXG225Z5.5V21.5X19F | 2.2 | 2.8 | 4.2 | 3.3 | 35 | 7 |
| NEXG475Z5.5V28.5X22F | 4.7 | 6.0 | 4.2 | 7.1 | 35 | 3.2 |

PRECAUTIONS

Please review the notes on correct use, safety and precautions found at
https://www.niccomp.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@niccomp.com

CASE DIMENSIONS (mm)

| NIC P/N | DIMENSIONS (mm) | | | | | | |
|----------------------|-----------------|------|-------|----------|-----|-----|-----|
| | D | H | S | L2 (ref) | LL | d1 | d2 |
| NEXG103Z5.5V11X5.5F | 11.0 | 5.5 | 5.08 | 4.3±1.0 | 2.7 | 0.2 | 1.2 |
| NEXG223Z5.5V11X5.5F | 11.0 | 5.5 | 5.08 | 4.3±1.0 | 2.7 | 0.2 | 1.2 |
| NEXG473Z5.5V11X5.5F | 11.0 | 5.5 | 5.08 | 4.3±1.0 | 2.7 | 0.2 | 1.2 |
| NEXG104Z5.5V11X6.5F | 11.0 | 6.5 | 5.08 | 4.3±1.0 | 2.7 | 0.2 | 1.2 |
| NEXG224Z5.5V13X9F | 13.0 | 9.0 | 5.08 | 3.4±1.0 | 2.2 | 0.4 | 1.2 |
| NEXG474Z5.5V14.5X18F | 14.5 | 18.0 | 5.08 | 3.4±1.0 | 2.4 | 0.4 | 1.2 |
| NEXG105Z5.5V16.5X19F | 16.5 | 19.0 | 5.08 | 4.1±1.0 | 2.7 | 0.4 | 1.2 |
| NEXG225Z5.5V21.5X19F | 21.5 | 19.0 | 7.62 | 4.5±1.5 | 3.0 | 0.6 | 1.2 |
| NEXG475Z5.5V28.5X22F | 28.5 | 22.0 | 10.16 | 8.0±1.5 | 6.1 | 0.6 | 1.4 |

