



[www.niccomp.com/pcn](http://www.niccomp.com/pcn) | Technical Support: [tpmq@niccomp.com](mailto:tpmq@niccomp.com)

Issued: June 28th, 2022

SUB: EOL Notice

Product Type: Radial Leaded Double Layer Capacitors  
NIC Series: NEZB, NEZHL, NEZHC, NEZX, NEZVL and NEZVN Series  
Product Specification:

<http://www.niccomp.com/products/catalog/nezb.pdf>  
<http://www.niccomp.com/products/catalog/nezhl.pdf>  
<http://www.niccomp.com/products/catalog/nezhc.pdf>  
<http://www.niccomp.com/products/catalog/nezx.pdf>  
[http://www.niccomp.com/products/catalog/nezvn\\_nezvl.pdf](http://www.niccomp.com/products/catalog/nezvn_nezvl.pdf)

Notification: End of Life Notification

The following is notice of end of life for the NEZB, NEZHL, NEZHC, NEZX, NEZVL and NEZVN series.

Effective: July 28th, 2022

Last Order Date: January 31<sup>st</sup>, 2023 for established customers with existing business and due to limited allocation purchases are restricted to past history of shipping quantities

Last Ship Date: March 30th, 2024 for established customers with existing business

Reason for Discontinuation: Low Demand

| Part Number            | Capacitance (F) | Voltage | Size (mm) | Possible Alternative  |
|------------------------|-----------------|---------|-----------|-----------------------|
| NEZB473Z5.5V13.5X7.5F  | 0.047           | 5.5     | 13.5X7.5  | NEXS473Z5.5V13X8.5F   |
| NEZB104Z5.5V13.5X7.5F  | 0.1             | 5.5     | 13.5X7.5  | NEXS104Z5.5V16.5X8.5F |
| NEZB224Z5.5V13.5X7.5F  | 0.22            | 5.5     | 13.5X7.5  | NEXS224Z5.5V16.5X13F  |
| NEZB334Z5.5V13.5X7.5F  | 0.33            | 5.5     | 13.5X7.5  | N/A                   |
| NEZB474Z5.5V21.5X8F    | 0.47            | 5.5     | 21.5X8    | NEXS474Z5.5V21.5X13   |
| NEZB105Z5.5V21.5X8F    | 1               | 5.5     | 21.5X8    | NEXS105Z5.5V28.5X14   |
| NEZB155Z5.5V21.5X8F    | 1.5             | 5.5     | 21.5X8    | N/A                   |
| NEZHL473Z5.5V13.5X9.5F | 0.047           | 5.5     | 13.5X9.5  | NEXS473Z5.5V13X8.5F   |
| NEZHL104Z5.5V13.5X9.5F | 0.1             | 5.5     | 13.5X9.5  | NEXS104Z5.5V16.5X8.5F |
| NEZHL224Z5.5V13.5X9.5F | 0.22            | 5.5     | 13.5X9.5  | NEXS224Z5.5V16.5X13F  |
| NEZHL474Z5.5V21.5X9.5F | 0.47            | 5.5     | 21.5X9.5  | NEXS474Z5.5V21.5X13F  |
| NEZHL105Z5.5V21.5X9.5F | 1               | 5.5     | 21.5X9.5  | NEXT105Z5.5V21.5X13F  |
| NEZHC473Z5.5V13.5X9.5F | 0.047           | 5.5     | 13.5X9.5  | NEXS473Z5.5V13X8.5F   |
| NEZHC104Z5.5V13.5X9.5F | 0.1             | 5.5     | 13.5X9.5  | NEXS104Z5.5V16.5X8.5F |
| NEZHC224Z5.5V13.5X9.5F | 0.22            | 5.5     | 13.5X9.5  | NEXS224Z5.5V16.5X13F  |
| NEZHC474Z5.5V21.5X9.5F | 0.47            | 5.5     | 21.5X9.5  | NEXS474Z5.5V21.5X13   |
| NEZHC684Z5.5V21.5X9.5F | 0.68            | 5.5     | 21.5X9.5  | NEXT105Z5.5V21.5X13F  |
| NEZHC105Z5.5V21.5X9.5F | 1               | 5.5     | 21.5X9.5  | NEXT105Z5.5V21.5X13F  |



[www.niccomp.com/pcn](http://www.niccomp.com/pcn) | Technical Support: [tpmg@niccomp.com](mailto:tpmg@niccomp.com)

| Part Number               | Capacitance (F) | Voltage | Size (mm) | Possible Alternative     |
|---------------------------|-----------------|---------|-----------|--------------------------|
| NEZX473Z5.5VV11.5X13F     | 0.047           | 5.5     | 11.5X13   | NEXS473Z5.5V13X8.5F      |
| NEZX473Z5.5VH11.5X5F      | 0.047           | 5.5     | 11.5X5    | N/A                      |
| NEZX104Z5.5VV11.5X13F     | 0.1             | 5.5     | 11.5X13   | N/A                      |
| NEZX104Z5.5VH11.5X5F      | 0.1             | 5.5     | 11.5X5    | N/A                      |
| NEZX224Z5.5VV11.5X13F     | 0.22            | 5.5     | 11.5X13   | N/A                      |
| NEZX224Z5.5VH11.5X5F      | 0.22            | 5.5     | 11.5X5    | N/A                      |
| NEZX334Z5.5VV11.5X13F     | 0.33            | 5.5     | 11.5X13   | N/A                      |
| NEZX334Z5.5VH11.5X5F      | 0.33            | 5.5     | 11.5X5    | N/A                      |
| NEZX105Z5.5VV19X20.5F     | 1               | 5.5     | 19X20.5   | NEXT105Z5.5V21.5X13F     |
| NEZX155Z5.5VV19X20.5F     | 1.5             | 5.5     | 19X20.5   | NEXG225Z5.5V21.5X19F     |
| NEZX474Z5.5VV11.5X13F     | 0.47            | 5.5     | 11.5X13   | NEXS473Z5.5V13X8.5F      |
| NEZX474Z5.5VH11.5X5F      | 0.47            | 5.5     | 11.5X5    | N/A                      |
| NEZX474Z5.5VV19X20.5F     | 0.47            | 5.5     | 19X20.5   | NEXS474Z5.5V21.5X13      |
| NEZVL473Z5.5V12.5x10.5TRF | 0.047           | 5.5     | 12.5x10.5 | N/A                      |
| NEZVL104Z5.5V12.5x10.5TRF | 0.1             | 5.5     | 12.5x10.5 | NEXCW473Z5.5V10.7X5.5TRF |
| NEZVL224Z5.5V12.5x10.5TRF | 0.22            | 5.5     | 12.5x10.5 | NEXCW224Z5.5V10.7X8.5TRF |
| NEZVN473Z5.5V12.5x8.5TRF  | 0.047           | 5.5     | 12.5x8.5  | NEXC473Z5.5V10.5X5.5TRF  |
| NEZVN104Z5.5V12.5x8.5TRF  | 0.1             | 5.5     | 12.5x8.5  | NEXC104Z5.5V10.5X5.5TRF  |
| NEZVN224Z5.5V12.5x8.5TRF  | 0.22            | 5.5     | 12.5x8.5  | NEXC224Z5.5V10.5X8.5TRF  |

Prepared by: Technical Product Marketing Group / [tpmg@niccomp.com](mailto:tpmg@niccomp.com)

➔ Follow NIC PCN alerts to get email notifications of EOL and PCN announcements at [www.niccomp.com/pcn](http://www.niccomp.com/pcn)

---

Use our Quickbuilder tool to find possible alternatives for the discontinued NACK parts:  
[http://www.niccomp.com/QuickBUILDER/qb\\_capacitor.php](http://www.niccomp.com/QuickBUILDER/qb_capacitor.php)

### FEATURES

- DOUBLE LAYER CAPACITOR
- WIDE TEMPERATURE (-25°C ~ +85°C)
- LONG LIFE (3,000 HOURS)
- SUITABLE FOR FLOW SOLDERING
- LEAD-FREE FINISH

**RoHS  
Compliant**  
includes all homogeneous materials



### CHARACTERISTICS

|  |  |   |
|--|--|---|
| Rated Voltage Range                          | 5.5VDC                                 |   |
| Rated Capacitance Range                      | 0.047F ~ 1.0F (47,000μF ~ 1,000,000μF) |   |
| Operating Temp. Range                        | -25°C ~ +85°C                          |   |
| Capacitance Tolerance                        | +80%/-20% (Z)                          |   |
| Load Life Test @ 85°C<br>3,000 hours         | Δ Capacitance Change                   | Less than ±30% of initial measured value      |
|  | Maximum ESR                            | Less than 400% of the specified maximum value |
| Temperature Characteristics<br>-25°C & +85°C | Δ Capacitance Change                   | Within ±30% of 20°C value                     |
|  | Maximum ESR                            | 500% of 20°C value                            |
| Shelf Life @ +85°C<br>(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) | Voltage (VDC) | Holding Voltage (VDC min.)* | Max. Leakage Current @ minutes (μA) | Max. ESR @ 1KHz (Ω) |
|------------------------|----------------|-----------------|---------------|-----------------------------|-------------------------------------|---------------------|
| NEZHC473Z5.5V13.5X9.5F | 13.5X9.5       | 0.047           | 5.5           | 4.0                         | 69 @ 30 minutes                     | 300                 |
| NEZHC104Z5.5V13.5X9.5F | 13.5X9.5       | 0.1             | 5.5           | 4.0                         | 100 @ 30 minutes                    | 200                 |
| NEZHC224Z5.5V13.5X9.5F | 13.5X9.5       | 0.22            | 5.5           | 4.0                         | 135 @ 30 minutes                    | 120                 |
| NEZHC474Z5.5V21.5X9.5F | 21.5X9.5       | 0.47            | 5.5           | 4.0                         | 216 @ 30 minutes                    | 50                  |
| NEZHC684Z5.5V21.5X9.5F | 21.5X9.5       | 0.68            | 5.5           | 4.0                         | 260 @ 30 minutes                    | 50                  |
| NEZHC105Z5.5V21.5X9.5F | 21.5X9.5       | 1.0             | 5.5           | 4.0                         | 315 @ 30 minutes                    | 30                  |

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

### CASE DIMENSIONS (mm)

| NIC P/N                | DIMENSIONS (mm) |     |     |     |                |                |
|------------------------|-----------------|-----|-----|-----|----------------|----------------|
|                        | D               | H   | S   | L   | d <sub>1</sub> | d <sub>2</sub> |
| NEZHC473Z5.5V13.5X9.5F | 13.5            | 9.5 | 5.0 | 6.0 | 1.2            | 0.5            |
| NEZHC104Z5.5V13.5X9.5F | 13.5            | 9.5 | 5.0 | 6.0 | 1.2            | 0.5            |
| NEZHC224Z5.5V13.5X9.5F | 13.5            | 9.5 | 5.0 | 6.0 | 1.2            | 0.5            |
| NEZHC474Z5.5V21.5X9.5F | 21.5            | 9.5 | 5.0 | 6.0 | 1.2            | 0.5            |
| NEZHC684Z5.5V21.5X9.5F | 21.5            | 9.5 | 5.0 | 6.0 | 1.2            | 0.5            |
| NEZHC105Z5.5V21.5X9.5F | 21.5            | 9.5 | 5.0 | 6.0 | 1.2            | 0.5            |

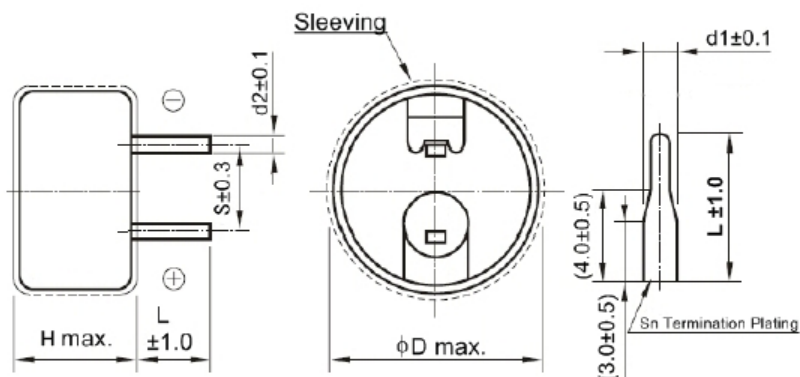
### PART NUMBER SYSTEM

NEZHC 104 Z 5.5V 13.5x9.5 F

Series      Capacitance Code in μF, first 2 digits are significant, third digit is no. of zeros

Working Voltage      Tolerance Code Z = +80%/-20%

Size in mm      RoHS Compliant



### 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](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](mailto:tpmg@niccomp.com)

