

# Memory Back-Up Capacitors

NEZH Series

## FEATURES

- DOUBLE LAYER CAPACITOR
- HIGH TEMPERATURE (+85°C)
- 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 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 & +85°C	Δ Capacitance Change	Within +30% of 20°C value
	Maximum ESR	Less than 500% of 20°C value
Shelf Life @ +85°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

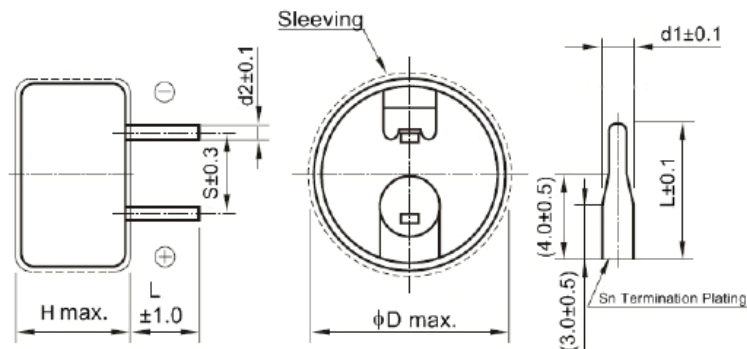
## STANDARD VALUES AND SPECIFICATIONS

NIC P/N	Case Size (mm)	Capacitance (F)	Holding Voltage (VDC min.)*	Max. Leakage Current @ 30 minutes (μA)	Max. ESR @ 1KHz (Ω)
NEZH473Z5.5V13.5X9.5F	13.5X9.5	0.047	4.0	69	300
NEZH104Z5.5V13.5X9.5F	13.5X9.5	0.1	4.0	100	200
NEZH224Z5.5V13.5X9.5F	13.5X9.5	0.22	4.0	135	120
NEZH474Z5.5V21.5X9.5F	21.5X9.5	0.47	4.0	216	50
NEZH684Z5.5V21.5X9.5F	21.5X9.5	0.68	4.0	260	50
NEZH105Z5.5V21.5X9.5F	21.5X9.5	1.0	4.0	315	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>
NEZH473Z5.5V13.5X9.5F	13.5	9.5	5.0	6.0	1.2	0.5
NEZH104Z5.5V13.5X9.5F	13.5	9.5	5.0	6.0	1.2	0.5
NEZH224Z5.5V13.5X9.5F	13.5	9.5	5.0	6.0	1.2	0.5
NEZH474Z5.5V21.5X9.5F	21.5	9.5	5.0	6.0	1.2	0.5
NEZH684Z5.5V21.5X9.5F	21.5	9.5	5.0	6.0	1.2	0.5
NEZH105Z5.5V21.5X9.5F	21.5	9.5	5.0	6.0	1.2	0.5



## PRECAUTIONS

WASHING is NOT RECOMMENDED. Additional guidelines and precautions can be found at [www.nicomp.com/precautions](http://www.nicomp.com/precautions)  
If in doubt or uncertainty, please review your specific application - process details with NIC's technical support personnel: [tpmg@nicomp.com](mailto:tpmg@nicomp.com)



NIC COMPONENTS CORP. [www.nicomp.com](http://www.nicomp.com) | [www.lowESR.com](http://www.lowESR.com) | [www.RFpassives.com](http://www.RFpassives.com) | [www.SMTmagnetics.com](http://www.SMTmagnetics.com)

SPECIFICATIONS ARE SUBJECT TO CHANGE

