

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 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 -25°C & +85°C	Δ Capacitance Change	Within ±30% of 20°C value
	Maximum ESR	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)	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.

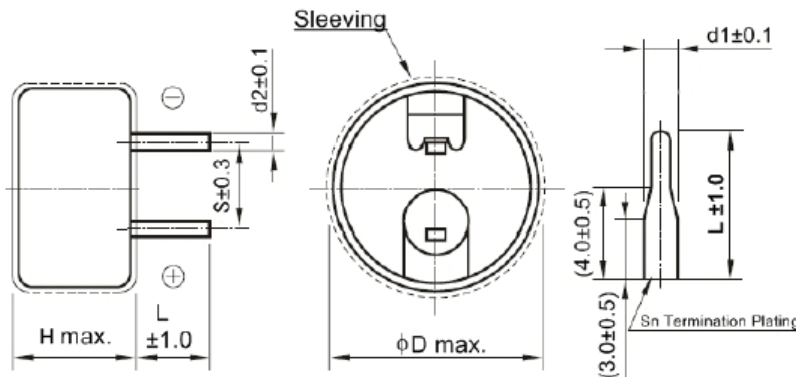
CASE DIMENSIONS (mm)

NIC P/N	DIMENSIONS (mm)					
	D	H	S	L	d ₁	d ₂
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

- NEZHC: Series
- 104: Capacitance Code in µF, first 2 digits are significant, third digit is no. of zeros
- Z: Tolerance Code Z = +80%/-20%
- 5.5V: Working Voltage
- 13.5x9.5: Size in mm
- F: RoHS Compliant



PRECAUTIONS

WASHING is NOT RECOMMENDED. 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

