

FEATURES

- DOUBLE LAYER CONSTRUCTION
- VERY HIGH CURRENT DISCHARGE (UP TO 1 AMP)
- IDEAL AS MEMORY BACK-UP POWER SUPPLY
- SUITABLE FOR FLOW SOLDERING
- LEAD-FREE FINISH

RoHS Compliant
includes all homogeneous materials

*See Part Number System for Details



CHARACTERISTICS

Rated Voltage Range	5.5 ~ 11VDC	
Rated Capacitance Range	0.022F ~ 1.0F (22,000 μ F ~ 1,000,000 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 -15% of initial measured value
	Maximum ESR	Less than 120% 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 -10% 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

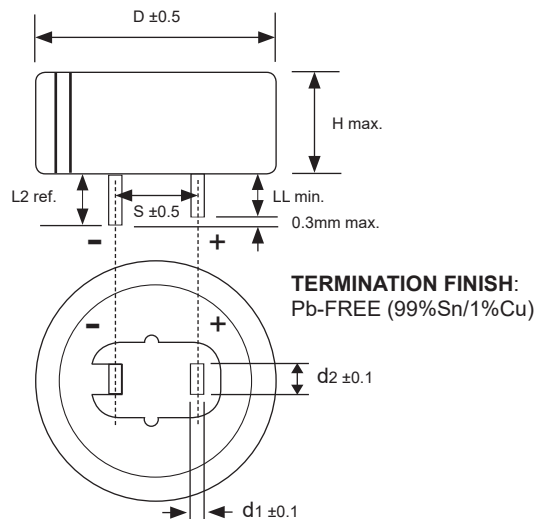
Super Capacitor
Application Guide

STANDARD VALUES AND SPECIFICATIONS

NIC P/N	Capacitance Value (F)		Rated Voltage (VDC)	Max. Current @ 30 minutes (mA)	Max. ESR @ 1KHz (Ω)	Typical DCR (Ω)
	Charge	Discharge				
NEXA223Z11V16x25F	0.022	0.035	11	0.066	20	33
NEXA473Z5.5V15x15.5F	0.047	0.075	5.5	0.071	20	17
NEXA104Z5.5V21.5 x 15.5F	0.1	0.16	5.5	0.15	8	8
NEXA104Z11V28.5x25.5F	0.1	0.16	11	0.30	8	6.4
NEXA224Z5.5V28.5x16.5F	0.22	0.35	5.5	0.33	5	4.5
NEXA224Z11V36.5x27.5F	0.22	0.35	11	0.66	6	3.1
NEXA474Z5.5V36.5x16.5F	0.47	0.75	5.5	0.71	3.5	2.2
NEXA474Z11V44.5x28.5F	0.47	0.75	11	1.41	4	2.1
NEXA105Z5.5V44.5x18.5F	1.0	1.6	5.5	1.5	2.5	1.1

CASE DIMENSIONS (mm)

NIC P/N	DIMENSIONS (mm)						
	D	H	S	L2 (ref)	LL	d1	d2
NEXA223Z11V16x25F	16.0	25	5.1	4.2+1/-2	5.0	0.4	1.2
NEXA473Z5.5V15x15.5F	16.0	15.5	5.1	4.2+1/-2	5.0	0.4	1.2
NEXA104Z5.5V21.5x15.5F	21.5	15.5	7.6	4.9+1/-2	5.5	0.6	1.2
NEXA104Z11V28.5x25.5F	28.5	25.5	10.2	8.5+1/-2	9.5	0.6	1.4
NEXA224Z5.5V28.5x16.5F	28.5	16.5	10.2	8.5+1/-2	9.5	0.6	1.4
NEXA224Z11V36.5x27.5F	36.5	27.5	15	7.5 \pm 2.0	9.5	1.0	1.4
NEXA474Z5.5V36.5x16.5F	36.5	16.5	15	8.7 \pm 2.0	9.5	0.6	1.7
NEXA474Z11V44.5x28.5F	44.5	28.5	20	7.5 \pm 2.0	9.5	1.0	1.4
NEXA105Z5.5V44.5x18.5F	44.5	18.5	20	7.5 \pm 2.0	9.5	1.0	1.4



PRECAUTIONS

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

