

## 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 (22,000µF ~ 1,000,000µF)	
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

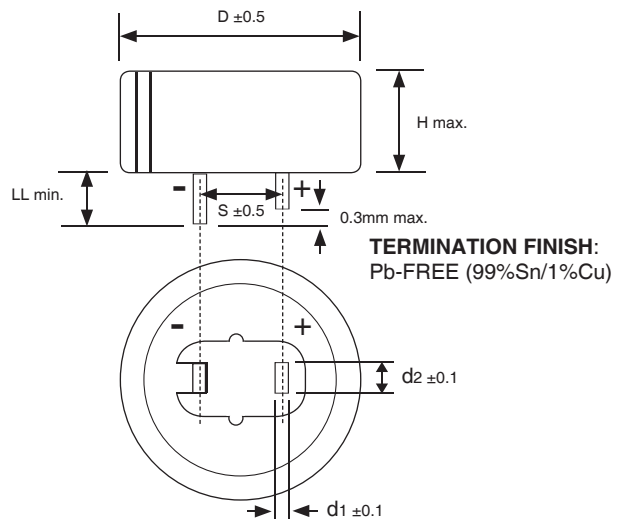
Super Capacitor  
Application Guide

## 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	LL	d1	d2
NEXA223Z11V16x25F	16.0	25	5.1	5.0	0.4	1.2
NEXA473Z5.5V15x15.5F	16.0	15.5	5.1	5.0	0.4	1.2
NEXA104Z5.5V21.5x15.5F	21.5	15.5	7.6	5.5	0.6	1.2
NEXA104Z11V28.5x25.5F	28.5	25.5	10.2	9.5	0.6	1.4
NEXA224Z5.5V28.5x16.5F	28.5	16.5	10.2	9.5	0.6	1.4
NEXA224Z11V36.5x27.5F	36.5	27.5	15	9.5	1.0	1.4
NEXA474Z5.5V36.5x16.5F	36.5	16.5	15	9.5	0.6	1.7
NEXA474Z11V44.5x28.5F	44.5	28.5	20	9.5	1.0	1.4
NEXA105Z5.5V44.5x18.5F	44.5	18.5	20	9.5	1.0	1.4



## PRECAUTIONS

WASHING is NOT RECOMMENDED. Additional guidelines and precautions can be found at [www.niccomp.com/precautions](http://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](mailto:tpmg@niccomp.com)

