

FEATURES

- DOUBLE LAYER CONSTRUCTION
- **WIDE TEMPERATURE RANGE** (-40°C ~ +85°C)
- HIGH CURRENT DISCHARGE (UP TO 500μA)
- IDEAL FOR LONG TIME 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	3.5 & 5.5VDC	
Rated Capacitance Range	0.47F ~ 2.2F (470,000μF ~ 2,200,000μF)	
Operating Temp. Range	-40°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 200% of the specified maximum value
	Current at 30 minutes	Less than 200% of the specified maximum value
Temperature Cycling (5 cycles, -25 ~ +85°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 ±20% 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

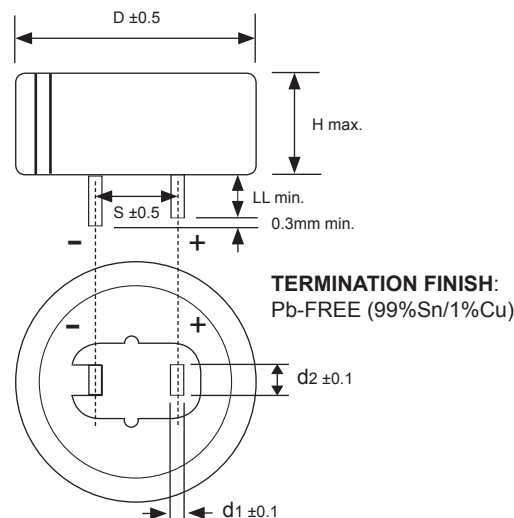
Super Capacitor
Application Guide

STANDARD VALUES AND SPECIFICATIONS

NIC P/N	Capacitance Value (F)		Holding Voltage (VDC min.)	Max. Current @ 30 minutes (mA)	Max. ESR @ 1KHz (Ω)	Typical DCR (Ω)
	Charge	Discharge				
NEXGW155Z3.5V16.5X14F	1.5	2.2	-	1.5	65	8.0
NEXGW474Z5.5V14.5X18F	0.47	0.60	4.2	0.71	120	26
NEXGW105Z5.5V16.5X19F	1.0	1.3	4.2	1.5	65	14
NEXGW225Z5.5V21.5X19F	2.2	2.8	4.2	3.3	35	7.0

CASE DIMENSIONS (mm)

NIC P/N	DIMENSIONS (mm)					
	D	H	S	LL	d1	d2
NEXGW155Z3.5V16.5X14F	16.5	14.0	5.08	3.1	0.4	1.2
NEXGW474Z5.5V14.5X18F	14.5	18.0	5.08	2.4	0.4	1.2
NEXGW105Z5.5V16.5X19F	16.5	19.0	5.08	2.7	0.4	1.2
NEXGW225Z5.5V21.5X19F	21.5	19.0	7.62	3.0	0.6	1.2



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

