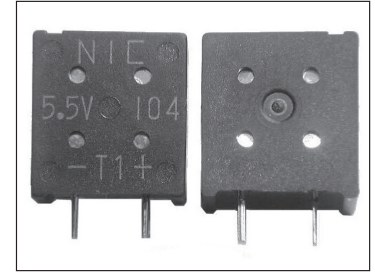


## FEATURES

- DOUBLE LAYER CONSTRUCTION
- POWER BACK-UP FOR CMOS RAM (UP TO 50 $\mu$ A DISCHARGE CURRENT)
- TAPE AND BOX PACKAGING
- SUITABLE FOR FLOW SOLDERING
- UL94V-0 MOLDED CASE
- LEAD-FREE FINISH

**RoHS Compliant**  
includes all homogeneous materials

\*See Part Number System for Details



## CHARACTERISTICS

Rated Voltage Range	3.5 ~ 6.5VDC	
Rated Capacitance Range	0.01F ~ 0.22F (10,000 $\mu$ F ~ 220,000 $\mu$ F)	
Operating Temp. Range	-25°C ~ +70°C	
Capacitance Tolerance	+80%/-20% (Z)	
Load Life Test @ 70°C 1,000 hours	$\Delta$ Capacitance Change	Less than $\pm$ 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 ~ +70°C)	$\Delta$ 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)	$\Delta$ Capacitance Change	Less than $\pm$ 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

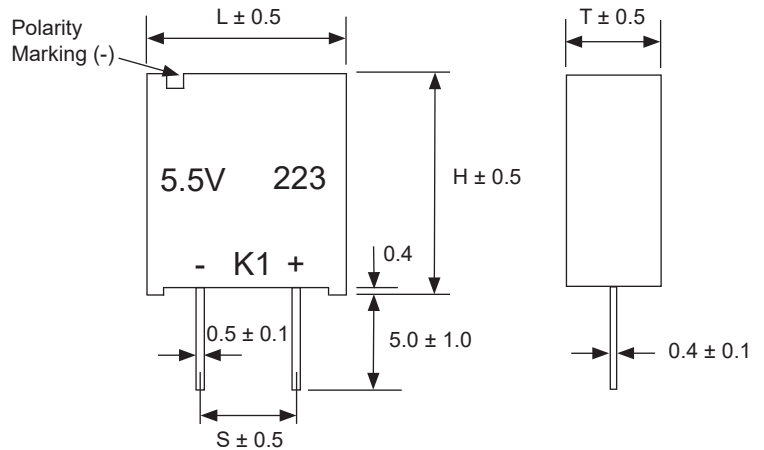
Super Capacitor  
Application Guide

## STANDARD VALUES AND SPECIFICATIONS

NIC P/N	Capacitance Value (F)		Rated Voltage (VDC)	Max. Current @ 30 minutes (mA)	Max. ESR @ 1KHz ( $\Omega$ )
	Charge	Discharge			
NEXM473Z3.5V10.5X5TBF	0.047	0.060	3.5	0.042	200
NEXM104Z3.5V10.5X5TBF	0.100	0.130	3.5	0.090	100
NEXM224Z3.5V10.5X6.5TBF	0.220	0.300	3.5	0.200	100
NEXM103Z5.5V10.5X5TBF	0.010	0.014	5.5	0.015	300
NEXM223Z5.5V10.5X5TBF	0.022	0.028	5.5	0.033	200
NEXM473Z5.5V10.5X5TBF	0.047	0.060	5.5	0.071	200
NEXM104Z5.5V10.5X6.5TBF	0.100	0.130	5.5	0.150	100
NEXM224Z5.5V10.5X6.5TBF	-	0.220	5.5	0.330	100
NEXM473Z6.5V10.5X6.5TBF	0.047	0.062	6.5	0.085	200

## CASE DIMENSIONS (mm)

NIC P/N	DIMENSIONS (mm)			
	L	H	S	T
NEXM473Z3.5V10.5X5TBF	10.5	11.5	5.0	5.0
NEXM104Z3.5V10.5X5TBF				5.0
NEXM224Z3.5V10.5X6.5TBF				6.5
NEXM103Z5.5V10.5X5TBF				5.0
NEXM223Z5.5V10.5X5TBF				5.0
NEXM473Z5.5V10.5X5TBF				5.0
NEXM104Z5.5V10.5X6.5TBF				6.5
NEXM224Z5.5V10.5X6.5TBF				6.5
NEXM473Z6.5V10.5X6.5TBF				6.5

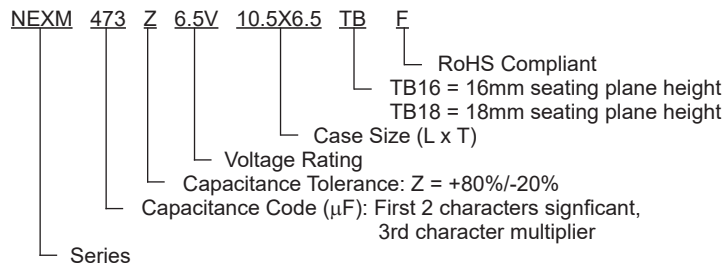


## PRECAUTIONS

Please review the notes on correct use, safety and precautions found at [https://www.niccomp.com/resource/files/double/Double\\_Layer\\_Capacitor\\_Guide\\_0810-RevBrA7.pdf](https://www.niccomp.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@niccomp.com](mailto:tpmg@niccomp.com)



## PART NUMBERING SYSTEM



## TAPING SPECIFICATIONS (mm)

a	b	c	W <sub>4</sub>	t <sub>3</sub>	P	P <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>	F	Δh	W	W <sub>0</sub>	W <sub>1</sub>	W <sub>2</sub>	H	D <sub>0</sub>	t <sub>1</sub>	t <sub>2</sub>	L
±0.5	±0.5	±0.5	±0.1	±0.1	±1.0	±0.3	±0.7	±1.3	±0.5	max.	<sup>+1/-0.5</sup>	min.	±0.5	max.	±0.5	±0.2	±0.2	max.	max.
11.5	10.5	-	0.5	0.4	12.7	12.7	3.85	6.35	5.0	2.0	18	12.5	9.0	3.0	16/18	φ4.0	0.7	1.5	11.0

