NEXC Series V-Chip Memory Back-up Capacitors



FEATURES

- DOUBLE LAYER CONSTRUCTION
- POWER BACK-UP FOR CMOS DEVICES
- SURFACE MOUNTABLE V-CHIP STYLE
- LEAD-FREE FINISH

CHARACTERISTICS

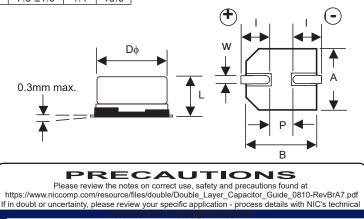
Rated Voltage Range	3.5 & 5.5VDC					
Rated Capacitance Range	0.047F ~ 1.0F (47,000μF ~ 1,000,000μF)					
Operating Temp. Range	-25°C ~ +85°C					
Capacitance Tolerance	+80%/-20% (Z)					
Load Life Test	Δ Capacitance Change	Less than ±30% of initial measured value				
+70°C 1,000 hours	Maximum ESR	Less than 200% of the specified maximum value				
+85°C 240 hours	Current at 30 minutes	Less than 200% of the specified maximum value				
	Δ Capacitance Change	Within +80%/-20% of specified value				
Temperature Cycling (5 cycles, -25 ~ +70°C)	Maximum ESR	Less than specified maximum value				
(0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Current at 30 minutes	Less than specified maximum value				
	Δ Capacitance Change	Less than ±20% of initial measured value				
Humidity Resistance	Maximum ESR	Less than 120% of the specified maximum value				
(240 hours @ 40°C/90% RH)	Current at 30 minutes	Less than 120% of the specified maximum value				

STANDARD VALUES AND SPECIFICATIONS

NIC P/N	Capacitance Value (F) Discharge	Working Voltage (VDC)	Holding Voltage (VDC min.)	Max. Current @ 30 minutes (mA)	Max. ESR @ 1KHz (Ω)
NEXC104Z3.5V10.5X5.5TRF	0.1	3.5	-	0.090	50
NEXC224Z3.5V10.5X5.5TRF	0.22	3.5	-	0.200	25
NEXC474Z3.5V10.5X8.5TRF	0.47	3.5	-	0.420	25
NEXC473Z5.5V10.5X5.5TRF	0.047	5.5	4.2	0.071	50
NEXC104Z5.5V10.5X5.5TRF	0.1	5.5	4.2	0.150	25
NEXC224Z5.5V10.5X8.5TRF	0.22	5,5	4.2	0.330	25
NEXC474Z5.5V16X9.5TRF	0.47	5.5	4.2	0.710	13
NEXC105Z5.5V21X10.5TRF	1.0	5.5	4.2	1.500	7

CASE DIMENSIONS (mm)

Case Size	Dφ ± 0.5	L max.	A/B ±0.2	I	W	Р
10.5 x 5.5	10.5	5.5	10.8	3.6 ±0.5	1.2	5.0
10.5 x 8.5	10.5	8.5	10.8	3.6 ±0.5	1.2	5.0
16 x 9.5	16.0	9.5	16.3	6.8 ±1.0	1.2	5.0
21 x 10.5	21.0	10.5	21.6	7.0 ±1.0	1.4	10.0



Performance Passives By Design

NIC Components Corp. 100 Baylis Road. Melville, NY 11747 Page 1 www.niccomp.com

Last Updated 1/9/2025. Specification subject to change without notice. Please check web site for latest information.

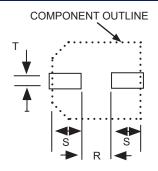
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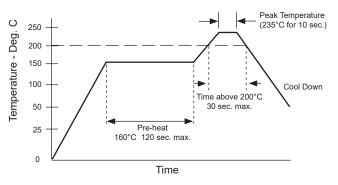
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LAND PATTERN DIMENSIONS (mm)

Case Diameter	R	S	Т
10.5	5.0	4.6	2.5
16.0	5.0	10.0	2.5
21.0	10.0	10.5	3.5



STANDARD RECOMMENDED REFLOW PROFILE



1. The temperatures shown are the surface temperature values on the top of the can and on the capacitor terminals.

2. 2x reflow process maximum. Capacitor should be allowed to return to room temperature before second reflow process.

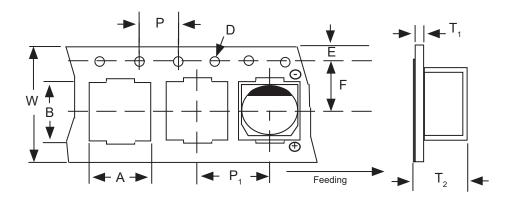
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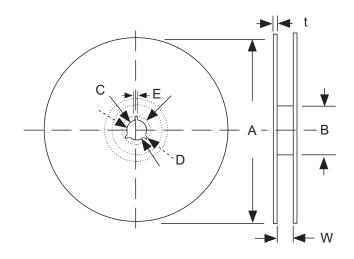
CARRIER TAPE DIMENSIONS (mm)

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Case Size	A	В	D	E	F	G	Р	P ₁	T ₁	Τ,	W	Quantity/Reel
10.5 x 5.5	11.4	13.0	1.55	1.75	11.5	-	4.0	16.0	0.4	6.0	24.0	1,000
10.5 x 8.5	11.4	13.0	1.55	1.75	11.5	-	4.0	16.0	0.4	9.0	24.0	500
16 x 9.5	18.0	20.0	1.55	1.75	14.2	28.4	4.0	24.0	0.5	10.0	32.0	200
21 x 10.5	23.0	25.0	1.55	1.75	20.2	40.4	4.0	32.0	0.5	12.0	44.0	150



REEL DIMENSIONS (mm)

Case Size	A ± 2.0	B ± 1.0	C ± 0.5	D ± 0.8	E ± 0.5	W	t
10.5 x 5.5	380	80.0	13.0	21.0	2.0	25.5	3.0
10.5 x 8.5	380	100.0	13.0	21.0	2.0	25.5	2.8
16 x 9.5	330	100.0	13.0	21.0	2.0	33.5	2.8
21 x 10.5	370	100.0	13.0	21.0	2.0	45.5	2.8



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