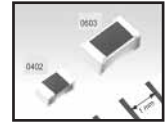


FEATURES

- IDEAL FOR USB2.0, IEEE1394 & HDMI HIGH SPEED DATA APPLICATIONS
- SUPER LOW CAPACITANCE (AS LOW AS 0.05pF)
- EIA SIZES 0402 AND 0603
- MEETS STANDARDS OF IEC 61000-4-2, LEVEL 4
- Pb-FREE REFLOW PROCESS COMPATIBLE

**RoHS
Compliant**
includes all homogeneous materials

*See Part Number System for Details



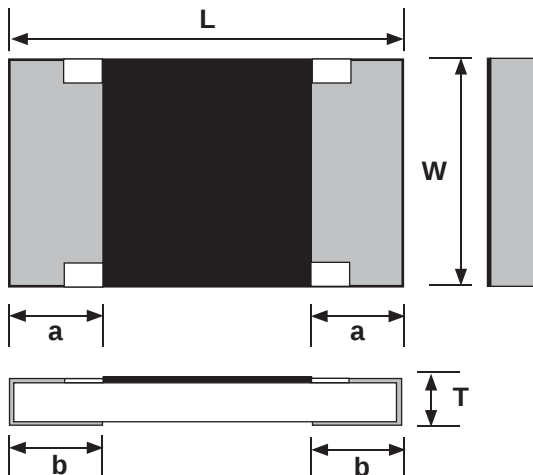
SPECIFICATIONS

Case Size	Part Number	Capacitance (*1)	Peak Voltage (*2)	Clamping Voltage (*3)	Rated Voltage	Leakage Current (max.) (*4)	Temperature Range
0402	NXED0402S15X501TRF	$0.05 \pm 0.05\text{pF}$	500V max. (350V typ.)	100V max.	15V max.	1 μA	-55 ~ +125°C
0603	NXED0603S15Y501TRF	$0.10 \pm 0.1\text{pF}$					

1. Capacitance value shall be measured at 1MHz $\pm 10\%$, 1V $\pm 0.2\text{Vrms}$ and 25 $\pm 2^\circ\text{C}$
2. Peak voltage shall be measured under the IEC61000-4-2, 8kV contact discharge ESD test conditions.
3. Clamping voltage shall be measured at 20ns after initiation of pulse and measured under IEC61000-4-2, 8kV contact discharge ESD test conditions
4. Leakage current shall be measured at 15Vdc.

DIMENSIONS (mm)

Case Size	L	W	T	a	b
0402	1.00 ± 0.05	0.50 ± 0.05	0.38 ± 0.05	0.20 ± 0.1	0.25 ± 0.1
0603	1.60 ± 0.10	0.80 ± 0.10	0.50 ± 0.10	0.30 ± 0.2	0.30 ± 0.2

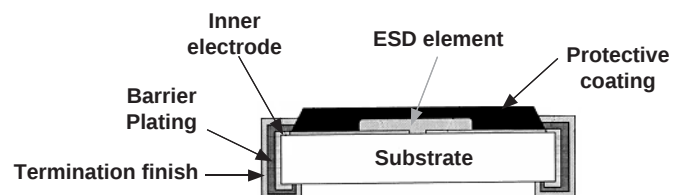


PART NUMBERING SYSTEM

NXED 0603 S 15 X 501 TR F

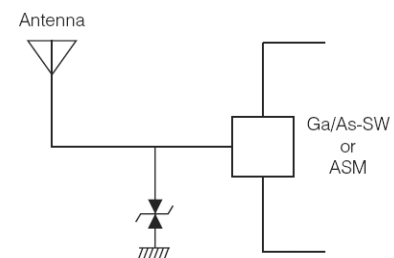
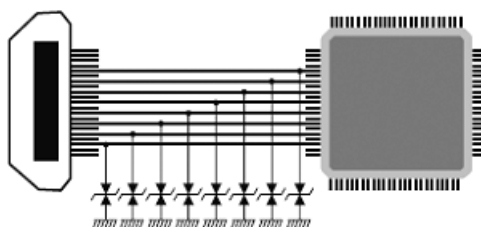
- NXED: Series
- 0603: Case Size
- S: Standard
- 15: Rated Voltage: 15Vdc
- X: Capacitance Code: X = 0.05pF, Y = 0.1pF
- 501: Peak Voltage
- TR: Tape & Reel
- F: RoHS Compliant

Structure	Material
Substrate	Al2O3
Protective Coating	Resin
ESD Element	Composite metal powder and resin
Inner Electrode	Thin metal film
Barrier Plating	Nickel
Termination Finish	100% Sn

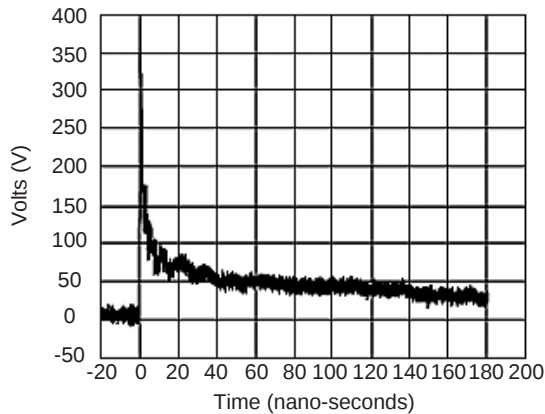


NXED APPLICATIONS

ESD Protection of Data Lines

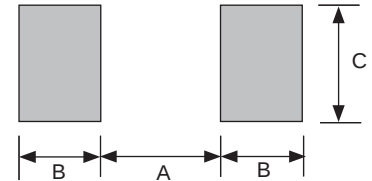


TYPICAL ESD SUPPRESSION CHARACTERISTICS

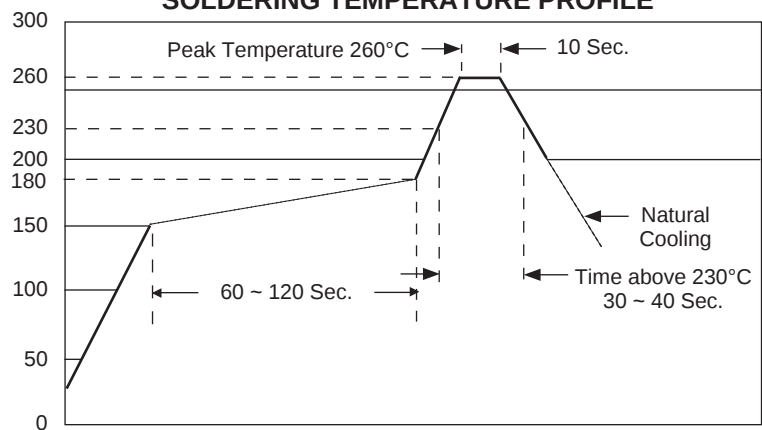


RECOMMENDED LAND PATTERN DIMENSIONS (mm)

Case Size	Reflow Soldering		
	A	B	C
0402	0.5 ~ 0.6	0.40 ~ 0.55	0.4 ~ 0.6
0603	0.7 ~ 0.9	0.55 ~ 0.75	0.8 ~ 1.0

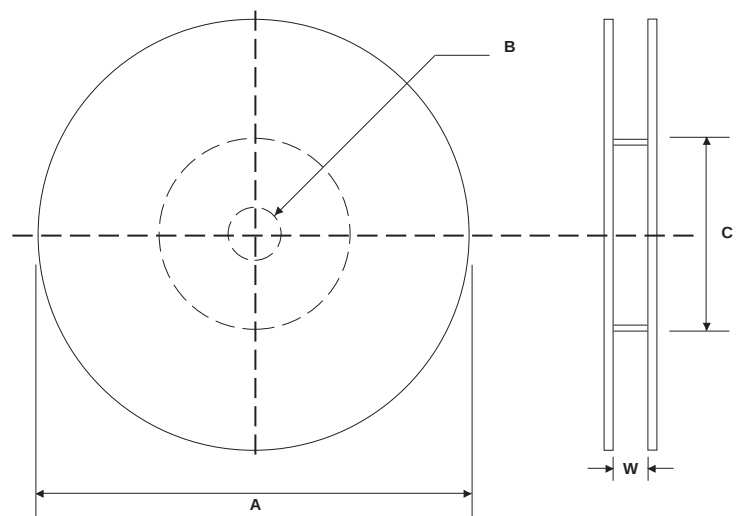
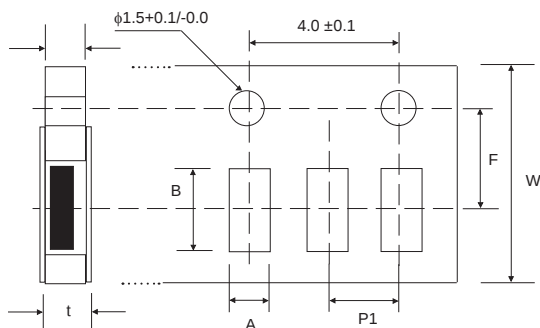


RECOMMENDED REFLOW SOLDERING TEMPERATURE PROFILE



CARRIER TAPE DIMENSIONS (mm)

Type	A	B	W	F	E	P ₁	T	Qty/Reel
NXED0402	0.70 ± 0.05	1.20 ± 0.05	8.0 ± 0.2	3.50 ± 0.05	1.75 ± 0.10	2.00 ± 0.05	0.60 ± 0.05	10,000
NXED0603	1.10 ± 0.10	1.90 ± 0.10				4.00 ± 0.05	0.70 ± 0.05	5,000



REEL DIMENSIONS (mm)

A +0/-3	B ± 1.0	C min.	W ± 0.3
180	13	60	9.0