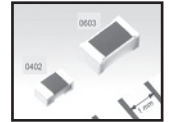


FEATURES

- IDEAL FOR USB2.0, IEEE1394 & HDMI HIGH SPEED DATA APPLICATIONS
- SUPER LOW CAPACITANCE (AS LOW AS 0.1pF)
- 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

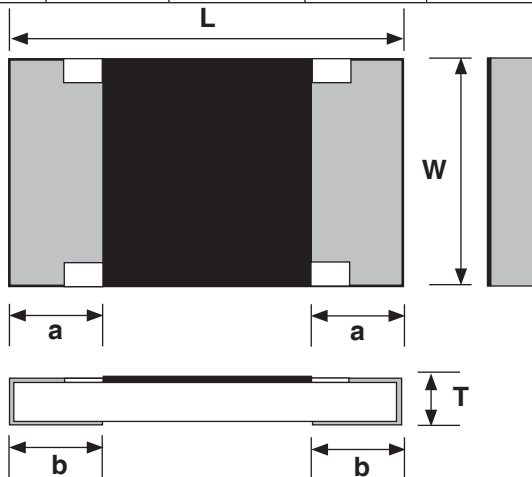
SPECIFICATIONS

Case Size	Part Number	Capacitance (*1)	Peak Voltage (*2)	Clamping Voltage (*3)	Rated Voltage	Leakage Current (max.) (*4)	Temperature Range
0402	NXED04S501A01TRF	0.1pF	500V max.	100V max.	30V max.	1μA	-55 ~ +125°C
0603	NXED06S701B02TRF	0.2pF	700V max.		20V max.		

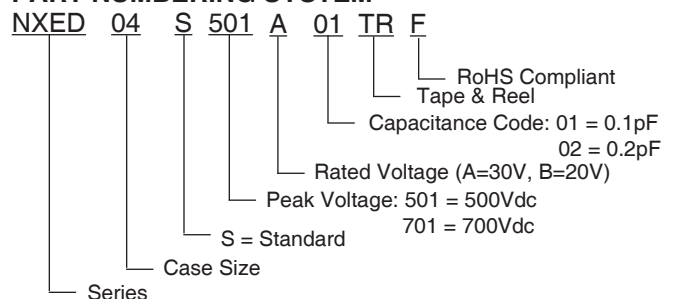
1. Capacitance value shall be measured at 1MHz $\pm 10\%$, 1V $\pm 0.2V_{rms}$ and 25 $\pm 2^\circ C$
2. Peak voltage shall be measured under the IEC61000-4-2, 8kV contact discharge for 0402 or 15kV air discharge for 0603.
3. Clamping voltage shall be measured at 30ns after initiation of pulse and measured under IEC61000-4-2, 8kV contact discharge for 0402 or 15kV air discharge for 0603.
4. Leakage current shall be measured at 30Vdc for 0402 or 20Vdc for 0603.

DIMENSIONS (mm)

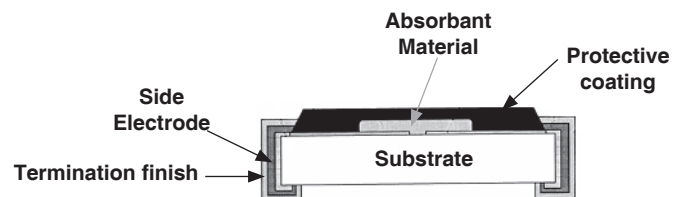
Case Size	L	W	T	a	b
0402	1.00 ± 0.05	0.50 ± 0.05	0.35 ± 0.05	0.20 ± 0.1	0.25 ± 0.1
0603	1.60 ± 0.10	0.80 $^{+0.15}_{-0.05}$	0.50 ± 0.10	0.30 ± 0.2	0.30 ± 0.1



PART NUMBERING SYSTEM

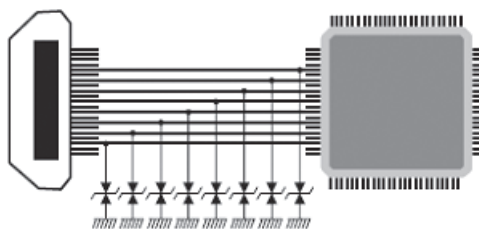


Structure	Material
Substrate	Al2O3
Protective Coating	Resin
ESD Element	Composite metal powder and resin
Inner Electrode	Thin metal film
Barrier Plating	Nickel
Termination Finish	100% Sn

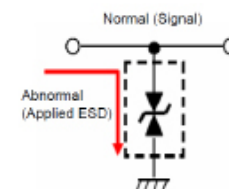


NXED APPLICATIONS

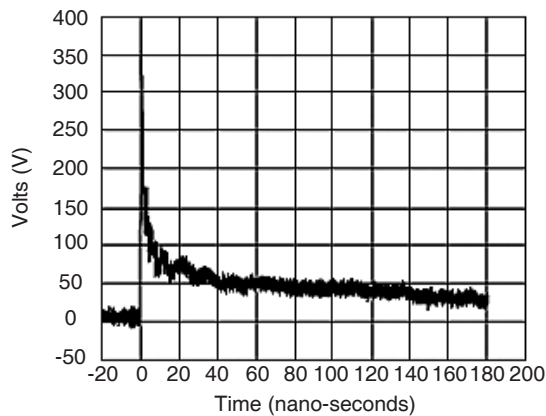
ESD Protection of Data Lines



Circuit configuration

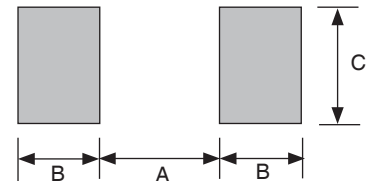


TYPICAL ESD SUPPRESSION CHARACTERISTICS

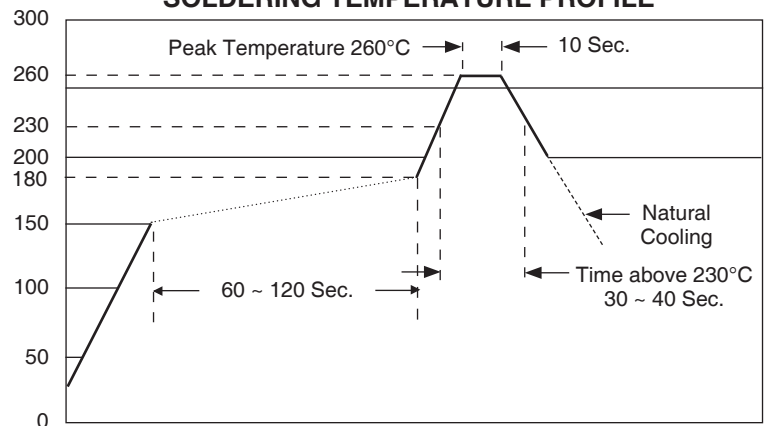


RECOMMENDED LAND PATTERN DIMENSIONS (mm)

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

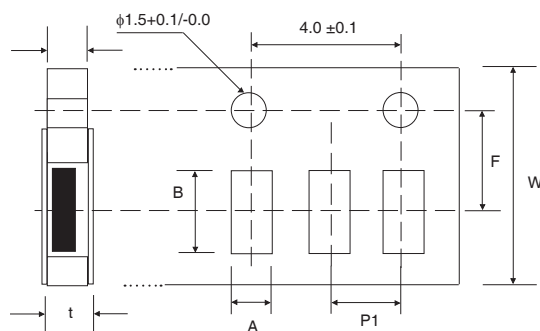


RECOMMENDED REFLOW SOLDERING TEMPERATURE PROFILE



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

