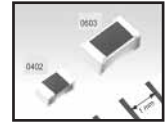


### FEATURES

- 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

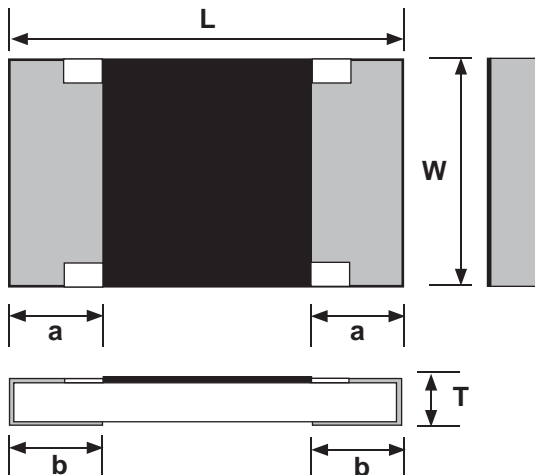
### SPECIFICATIONS

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

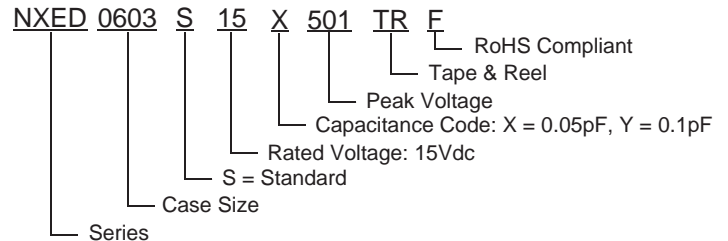
1. Capacitance value shall be measured at 1MHz ±10%, 1V ± 0.2Vrms and 25 ± 2°C
2. Peak voltage shall be measured under the IEC61000-4-2, 8kV contact discharge ESD test conditions.
3. Clamping voltage shall be measured at 20ns after initiation of pulse and measured under IEC61000-4-2, 8kV contact discharge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

### DIMENSIONS (mm)

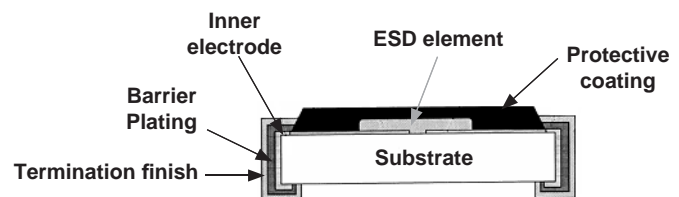
Case Size	L	W	T	a	b
0402	1.00 ± 0.05	0.50 ± 0.05	0.38 ± 0.05	0.20 ± 0.1	0.25±0.1
0603	1.60 ± 0.10	0.80 ± 0.10	0.50 ± 0.10	0.30 ± 0.2	0.30±0.2



### PART NUMBERING SYSTEM

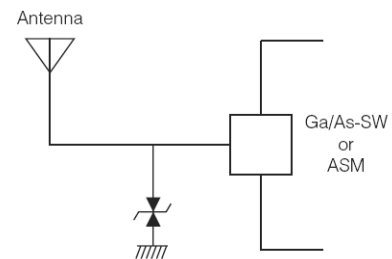
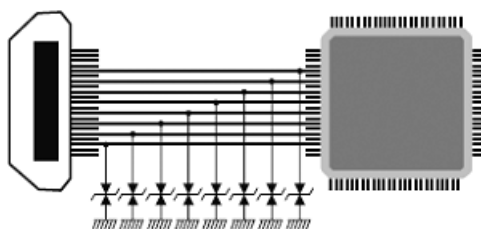


Structure	Material
Substrate	Al2O3
Protective Coating	Resin
ESD Element	Composite metal powder and resin
Inner Electrode	Thin metal film
Barrier Plating	Nickel
Termination Finish	100% Sn

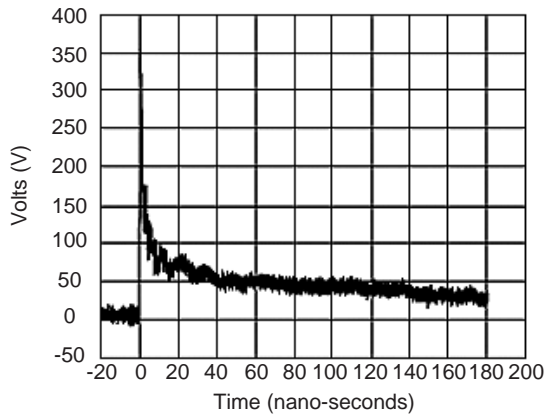


### NXED APPLICATIONS

#### ESD Protection of Data Lines

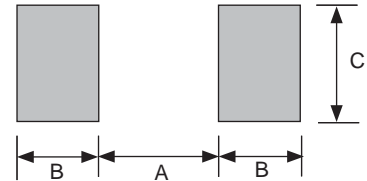


### TYPICAL ESD SUPPRESSION CHARACTERISTICS

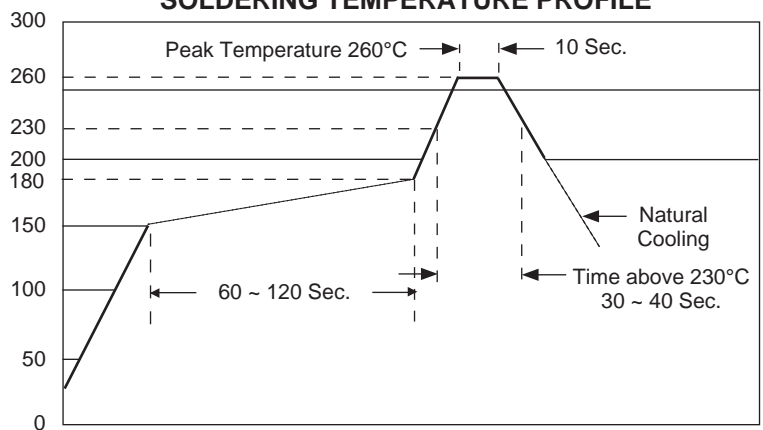


### RECOMMENDED LAND PATTERN DIMENSIONS (mm)

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

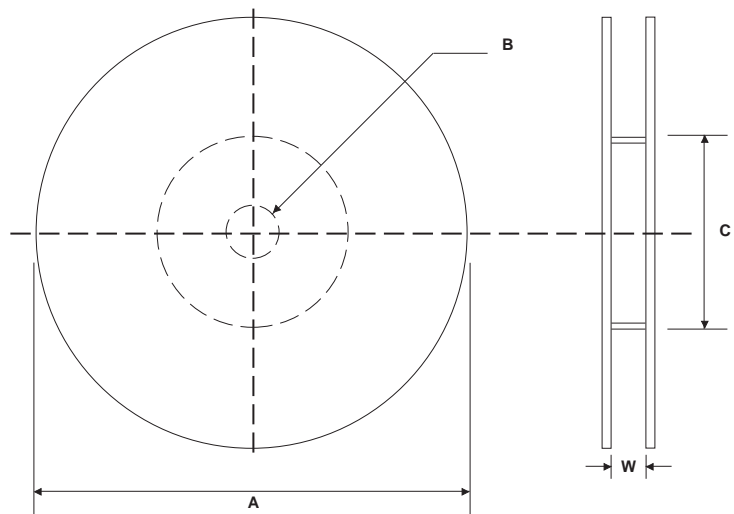
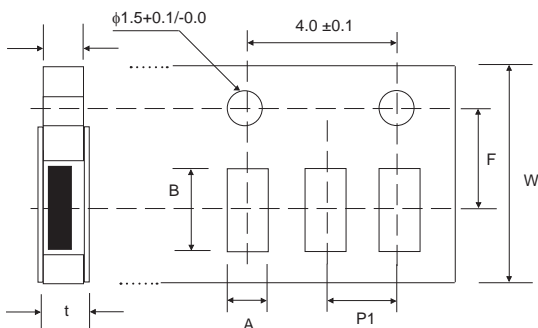


### RECOMMENDED REFLOW SOLDERING TEMPERATURE PROFILE



### CARRIER TAPE DIMENSIONS (mm)

Type	A	B	W	F	E	P <sub>1</sub>	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