

APPLICATIONS

- ✧ Cellular Handsets and Accessories.
- ✧ High Speed I/O Lines.
- ✧ USB Ports.
- ✧ Serial ATA.
- ✧ PCI Express.
- ✧ Servers, Notebook, and Desktop PC.
- ✧ Display Ports.

IEC COMPATIBILITY

- ✧ IEC61000-4-2 (ESD) $\pm 25\text{kV}$ (air), $\pm 15\text{kV}$ (contact).
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns).
- ✧ IEC61000-4-5 (Lightning) 5A (8/20 μs).

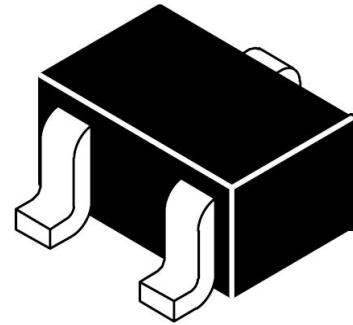
FEATURES

- ✧ 100 Watts Peak Pulse Power per Line ($t_p=8/20\mu\text{s}$).
- ✧ Protects Two Lines in Common Mode or One Line in Differential Mode.
- ✧ Low Clamping Voltage.
- ✧ Working Voltages : 5.0V.
- ✧ Low Leakage Current.

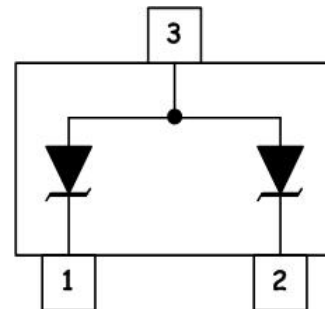
MECHANICAL CHARACTERISTICS

- ✧ SOT-323 Package.
- ✧ Molding Compound Flammability Rating : UL 94V-O.
- ✧ Weight 6.0 Milligrams (Approximate).
- ✧ Quantity Per Reel : 3,000pcs.
- ✧ Reel Size : 7 inch.
- ✧ Lead Finish : Lead Free.

SOT-323



PIN CONFIGURATION



DEVICE CHARACTERISTICS

MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	P _{PP}	100	Watts
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature Range	T _J	-55 ~ 150	°C
Storage Temperature Range	T _{STG}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)									
PART NUMBER	DEVICE MARKING	V _{RWM} (V) (max.)	V _B (V) (min.)	I _T (mA)	V _C @1A (max.)	V _C (max.) (@A)		I _R (μA) (max.)	C _T (pF) (typ.)
SDA05W	T5W	5	6	1	9.8	17	5	1	35

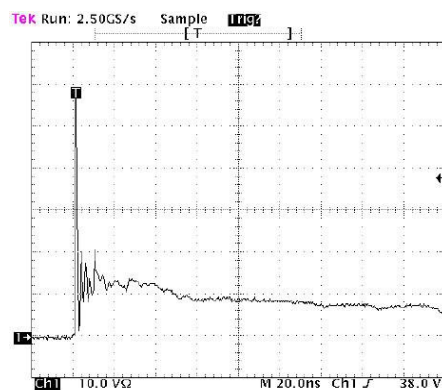
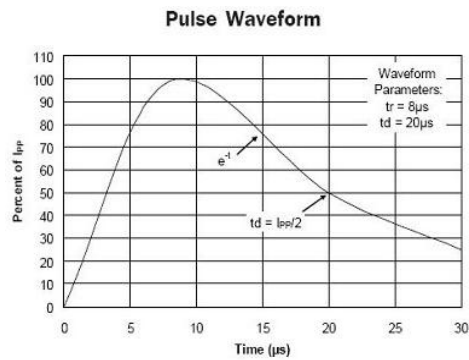
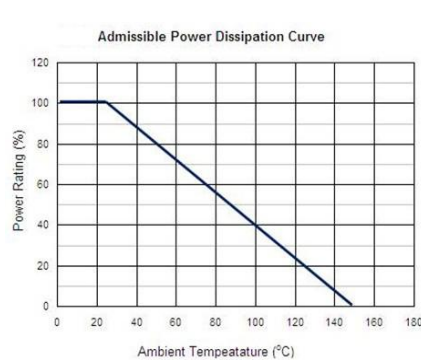


Figure 1. ESD Clamping Voltage Screenshot
Positive 8 kV contact per IEC 61000-4-2

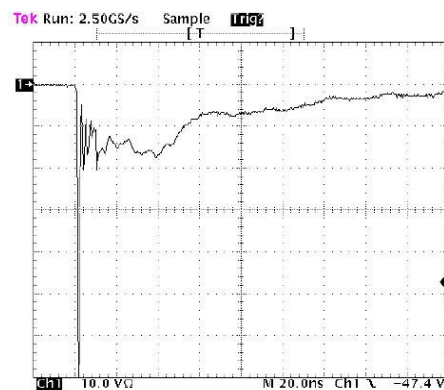
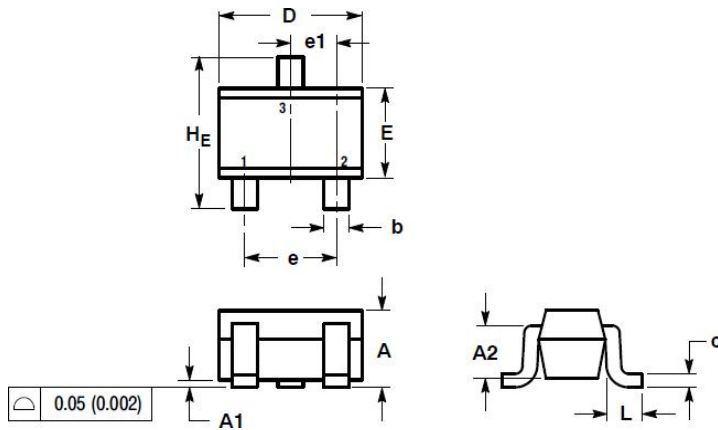
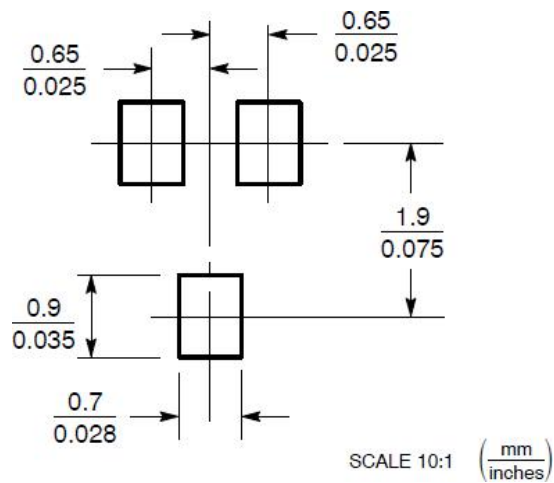


Figure 2. ESD Clamping Voltage Screenshot
Negative 8 kV contact per IEC 61000-4-2

SOT-323 PACKAGE OUTLINE & DIMENSIONS

NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.040
A1	0.00	0.05	0.10	0.000	0.002	0.004
A2	0.70 REF			0.028 REF		
b	0.30	0.35	0.40	0.012	0.014	0.016
c	0.10	0.18	0.25	0.004	0.007	0.010
D	1.80	2.10	2.20	0.071	0.083	0.087
E	1.15	1.24	1.35	0.045	0.049	0.053
e	1.20	1.30	1.40	0.047	0.051	0.055
e1	0.65 BSC			0.026 BSC		
L	0.20	0.38	0.56	0.008	0.015	0.022
HE	2.00	2.10	2.40	0.079	0.083	0.095

*** SOLDERING FOOTPRINT**


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