

## Applications

- ◆ Cell Phone Handsets and Accessories
- ◆ Microprocessor based equipment
- ◆ Personal Digital Assistants (PDA's)
- ◆ Notebooks, Desktops, and Servers
- ◆ Portable Instrumentation
- ◆ Peripherals
- ◆ USB Interface

## IEC Compatibility

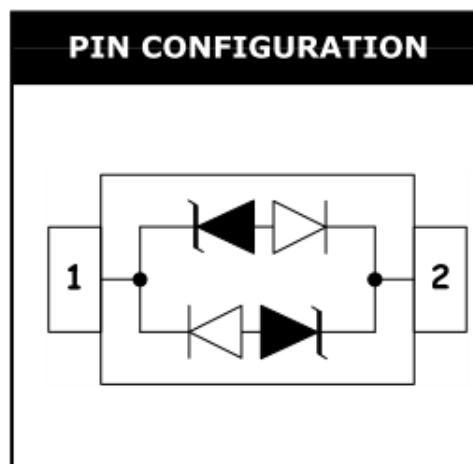
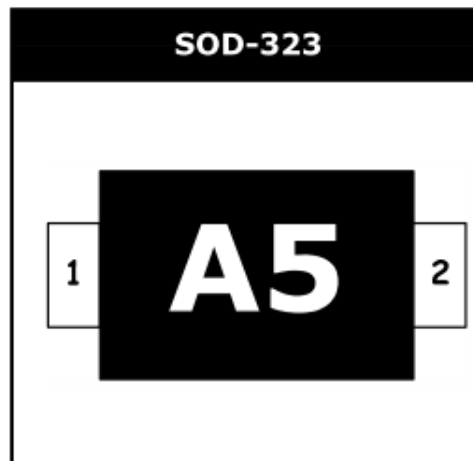
- ◆ IEC61000-4-2 (ESD)  $\pm 30\text{kV}$  (air),  $\pm 30\text{kV}$  (contact) : 3.3 ~ 15V
- ◆ IEC61000-4-2 (ESD)  $\pm 25\text{kV}$  (air),  $\pm 15\text{kV}$  (contact) : 24V
- ◆ IEC61000-4-4 (EFT) 40A (5/50  $\eta$  s)

## Features

- ◆ 450 Watts Peak Pulse Power per Line ( $t_p=8/20\mu\text{s}$ )
- ◆ Protects one I/O line (bidirectional)
- ◆ Low clamping voltage
- ◆ Working voltages: 3.3V, 5V, 8V, 12V, 15V, 24V
- ◆ Low leakage current

## Mechanical Characteristics

- ◆ JEDEC SOD-323 Package
- ◆ Molding Compound Flammability Rating : UL 94V-O
- ◆ Weight 5 Milligrams (Approximate)
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free



## Device Characteristics

MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20µs waveform)	P <sub>PP</sub>	450	Watts
Lead Soldering Temperature	T <sub>L</sub>	260 (10 sec.)	°C
Operating Temperature Range	T <sub>J</sub>	-55 ~ 150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)									
PART NUMBER	DEVICE MARKING	V <sub>RWM</sub> (V) (max.)	V <sub>B</sub> (V) (min.)	I <sub>T</sub> (mA)	V <sub>C</sub> @1A (max.)	V <sub>C</sub> (max.) (@A)		I <sub>R</sub> (µA) (max.)	C <sub>T</sub> (pF) (typ.)
ECGBL03CG	A3	3.3	4.0	1	5.8	18.0	25	1	3
ECGBL05CG	A5	5.0	6.0	1	9.8	21.0	23	1	3
ECGBL08CG	A8	8.0	8.5	1	13.4	23.0	20	1	3
ECGBL12CG	AD	12.0	13.3	1	19.0	30.0	14	1	3
ECGBL15CG	AE	15.0	16.7	1	24.0	39.0	10	1	3
ECGBL24CG	AH	24.0	26.7	1	43.0	56.0	7	1	3

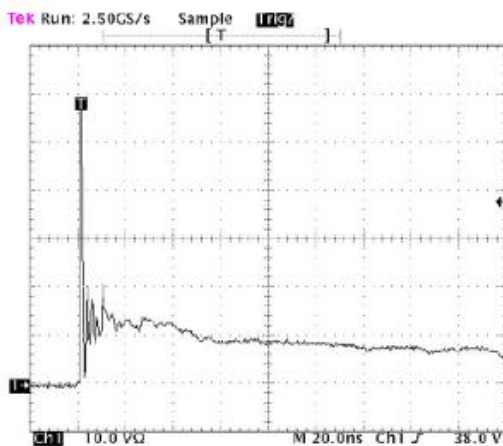


Figure 1. ESD Clamping Voltage Screenshot  
Positive 8 kV contact per IEC 61000-4-2

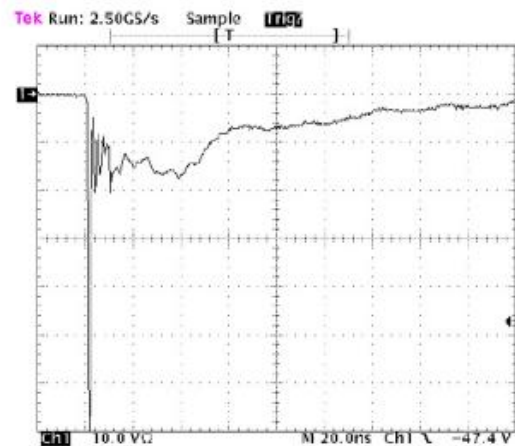
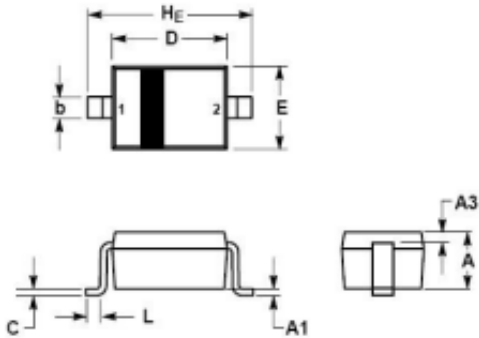


Figure 2. ESD Clamping Voltage Screenshot  
Negative 8 kV contact per IEC 61000-4-2

SOD323 Package Outline & Dimensions



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.031	0.035	0.040
A1	0.00	0.05	0.10	0.000	0.002	0.004
A3	0.15 REF			0.006 REF		
b	0.25	0.32	0.4	0.010	0.012	0.016
C	0.089	0.12	0.177	0.003	0.005	0.007
D	1.60	1.70	1.80	0.062	0.066	0.070
E	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
HE	2.30	2.50	2.70	0.090	0.098	0.105

SOLDERING FOOTPRINT

