

## APPLICATIONS

- ✧ Cellular Handsets and Accessories.
- ✧ High Speed I/O Lines.
- ✧ Notebooks & Handhelds.
- ✧ Peripherals.
- ✧ Personal Digital Assistants (PDA).
- ✧ Servers, Notebook, and Desktop PC.

## IEC COMPATIBILITY

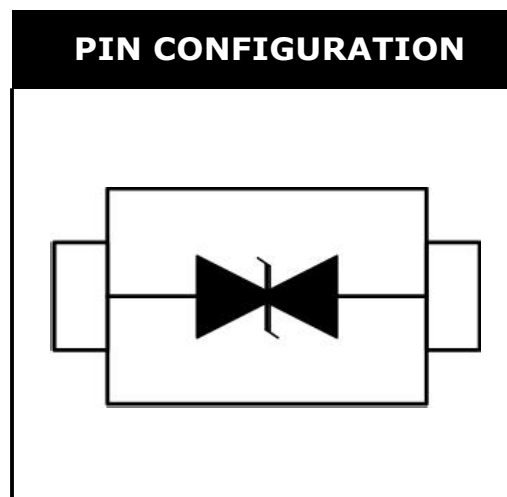
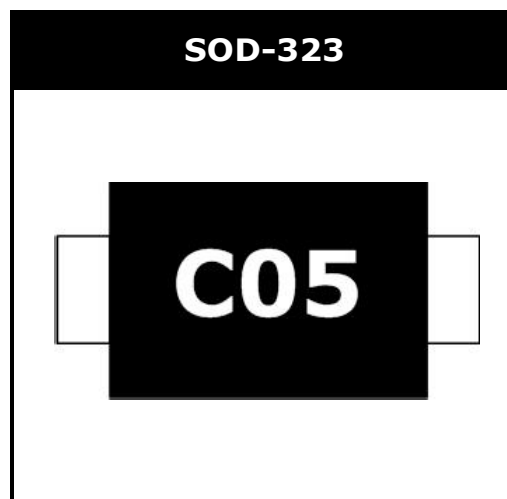
- ✧ IEC61000-4-2 (ESD)  $\pm 15\text{kV}$  (air),  $\pm 8\text{kV}$  (contact).
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns).

## FEATURES

- ✧ 100 Watts Peak Pulse Power per Line ( $t_p=8/20\mu\text{s}$ ).
- ✧ Protects One I/O Line (Bidirection).
- ✧ Low Clamping Voltage.
- ✧ Working Voltages : 5.0V.
- ✧ Low Leakage Current.

## MECHANICAL CHARACTERISTICS

- ✧ SOD-323 Package.
- ✧ Molding Compound Flammability Rating : UL 94V-O.
- ✧ Weight 4.7 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>	100	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 <sub>B</sub>	I <sub>T</sub>	V <sub>C</sub>	V <sub>C</sub>		I <sub>R</sub>	C <sub>T</sub>
		(V) (max.)	(V) (min.)	(mA)	@1A (max.)	(max.)	(@A)	(μA) (max.)	(pF) (typ.)
ESDA05CW	C05	5	6	1	12	20	5	1	10

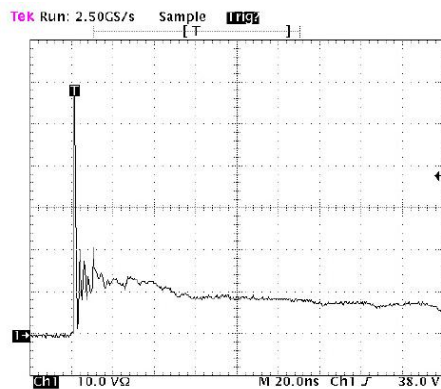
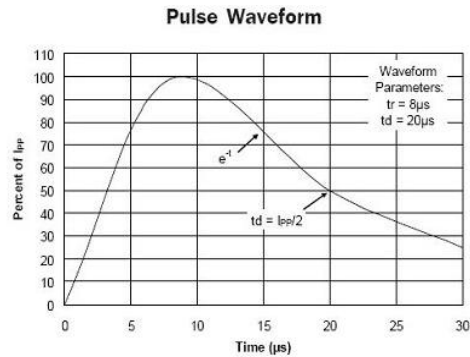
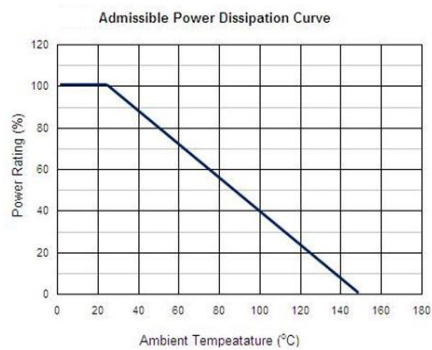


Figure 1. ESD Clamping Voltage Screenshot  
Positive 8 kV contact per IEC 61000-4-2

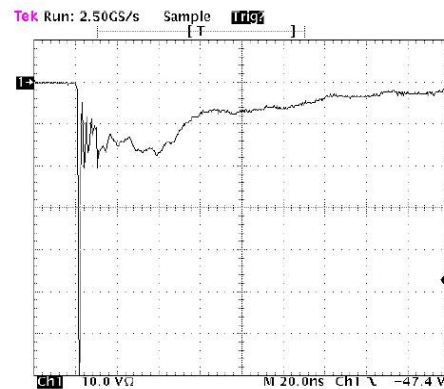
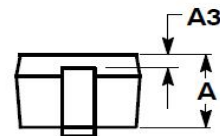
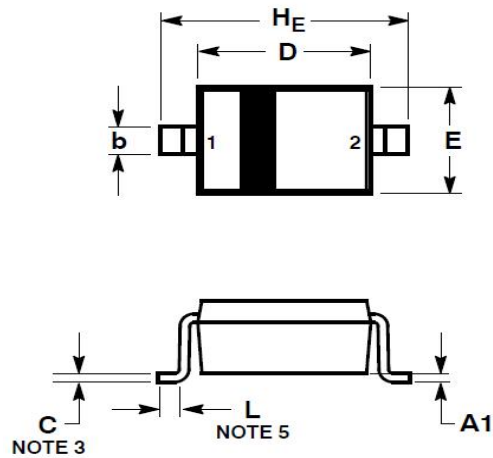
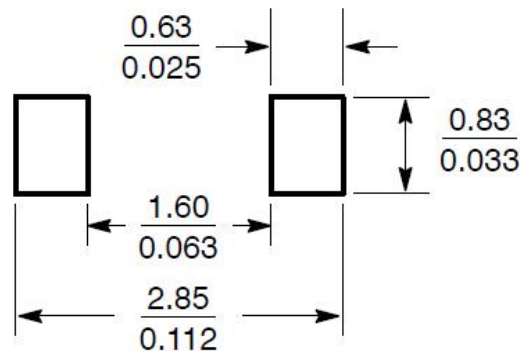


Figure 2. ESD Clamping Voltage Screenshot  
Negative 8 kV contact per IEC 61000-4-2

**SOD-323 PACKAGE OUTLINE & DIMENSIONS**


- NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
  2. CONTROLLING DIMENSION: MILLIMETERS.
  3. LEAD THICKNESS SPECIFIED PER L/F DRAWING WITH SOLDER PLATING.
  4. DIMENSIONS A AND B DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.
  5. DIMENSION L IS MEASURED FROM END OF RADIUS.

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		
$H_E$	2.30	2.50	2.70	0.090	0.098	0.105

**\* SOLDERING FOOTPRINT**


Website: <http://www.jksemi.com>

For additional information, please contact your local Sales Representative.

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