

## APPLICATIONS

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

## IEC COMPATIBILITY

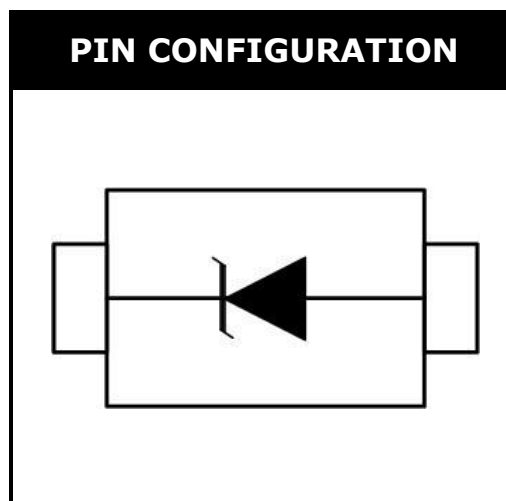
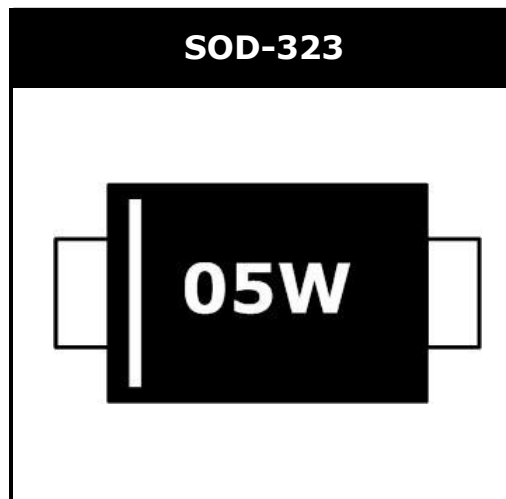
- ✧ IEC61000-4-2 (ESD)  $\pm 30\text{kV}$  (air),  
 $\pm 30\text{kV}$  (contact) --  $3.3\text{V} \sim 20\text{V}$ .
- ✧ IEC61000-4-2 (ESD)  $\pm 15\text{kV}$  (air),  
 $\pm 8\text{kV}$  (contact) --  $24\text{V} \sim 36\text{V}$ .
- ✧ IEC61000-4-4 (EFT)  $40\text{A}$  ( $5/50\mu\text{s}$ ).
- ✧ IEC61000-4-5 (Lightning)  $12\text{A}$  ( $8/20\mu\text{s}$ ).

## FEATURES

- ✧ 500 Watts Peak Pulse Power per Line ( $t_p=8/20\mu\text{s}$ ).
- ✧ Protects one I/O or power line.
- ✧ Low clamping voltage.
- ✧ Working voltages:  $3.3\text{V} \sim 36\text{V}$ .
- ✧ 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>	320	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.)
SD03HW	03W	3.3	4	1	6.5	12	30	40	450
SD05HW	05W	5	6	1	9.8	18	26	10	300
SD08HW	08W	8	7.8	1	13.4	21	24	10	150
SD12HW	12W	12	13.3	1	19	25	19	1	130
SD15HW	15W	15	16.7	1	24	30	17	1	120
SD18HW	18W	18	19	1	28	34	15	1	100
SD24HW	24W	24	26.7	1	43	48	10	1	80
SD36HW	36W	36	40	1	60	75	8	1	30

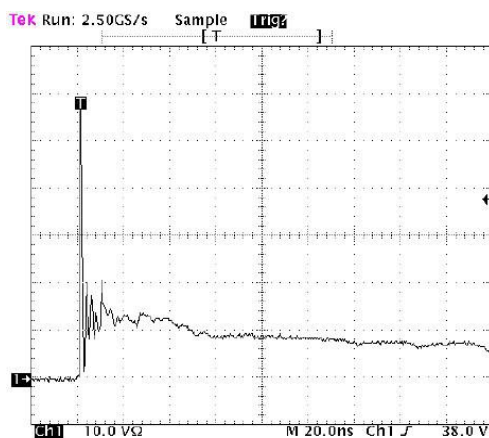


Figure 1. ESD Clamping Voltage Screenshot  
Positive 8 kV contact per IEC 61000-4-2

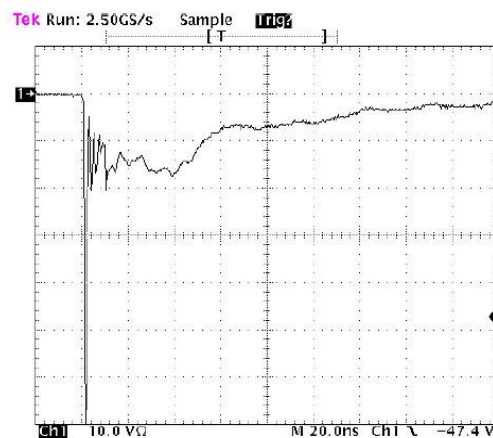
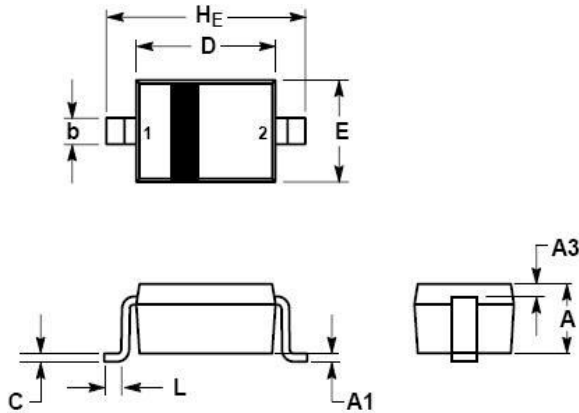


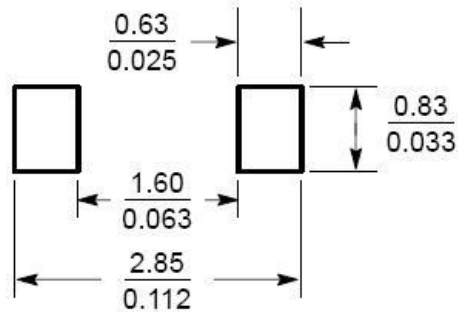
Figure 2. ESD Clamping Voltage Screenshot  
Negative 8 kV contact per IEC 61000-4-2

**SOD-323 PACKAGE OUTLINE & DIMENSIONS**



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**



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

For additional information, please contact your local Sales Representative.

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