

APPLICATIONS

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

IEC COMPATIBILITY

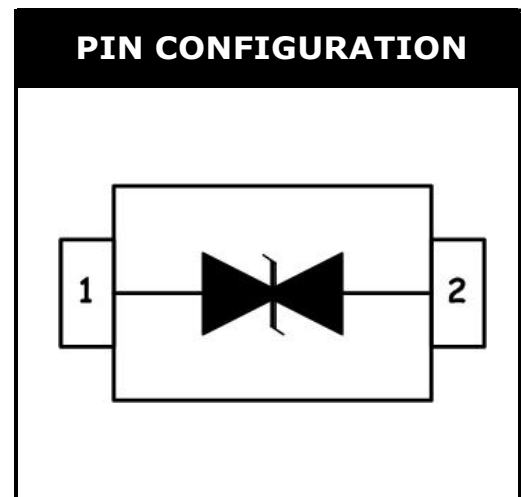
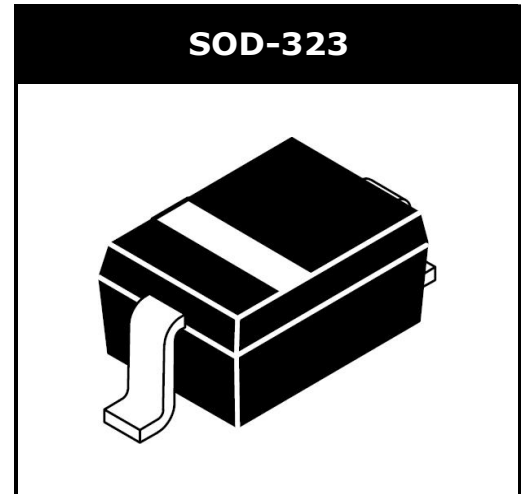
- ✧ IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact).
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns).

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 : 3.3V and 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 _{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 _B | I _T | V _C | V _C | | I _R | C _T |
|-------------|----------------|------------------|----------------|----------------|----------------|----------------|------|----------------|----------------|
| | | (V) (max.) | (V) (min.) | (mA) | @1A (max.) | (max.) | (@A) | (μA) (max.) | (pF) (typ.) |
| SDA3301CW | 3CW | 3.3 | 4.5 | 1 | 7.5 | 15 | 5 | 1 | 35 |
| SDA0501CW | 5CW | 5 | 6 | 1 | 12 | 17.5 | 5 | 1 | 30 |

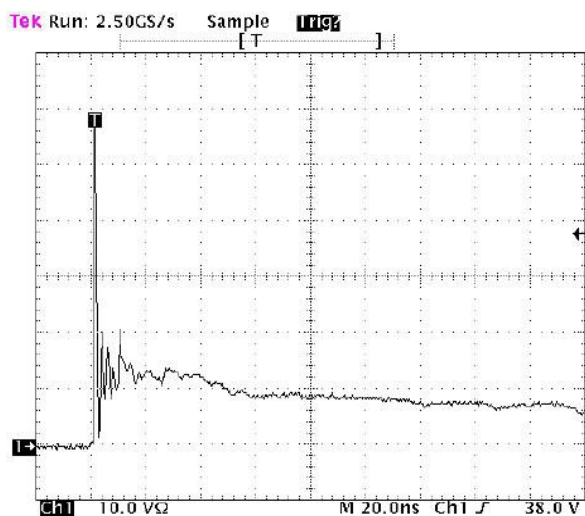


Figure 1. ESD Clamping Voltage Screenshot
Positive 8 kV contact per IEC 61000-4-2

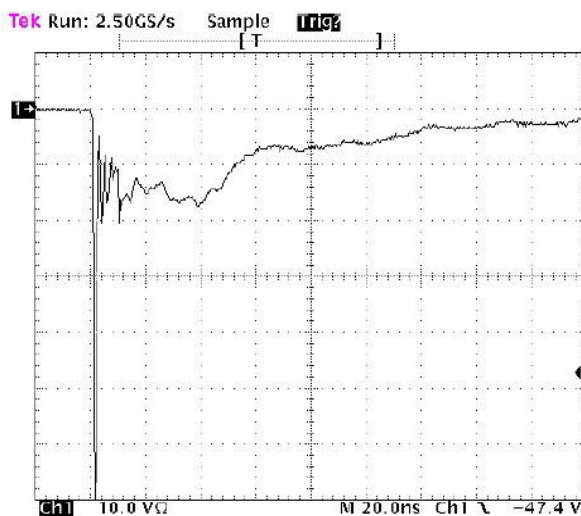
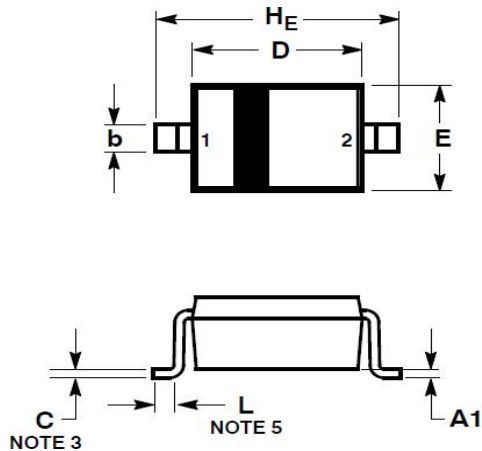
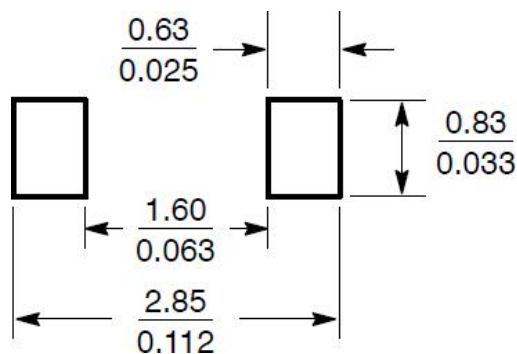


Figure 2. ESD Clamping Voltage Screenshot
Negative 8 kV contact per IEC 61000-4-2

SOD-323 PACKAGE OUTLINE & DIMENSIONS


- 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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