KUU SEMICONDUCTOR

ESD5Z5.0T1G

Transient Voltage Suppressors

DESCRIPTION

The ESD5Z5.0T1G designed to protect voltage sensitive components from ESD and transient voltage events. Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium. Because of its small size, it is suited for use in cellular phones, portable devices, digital cameras, power supplies and many other portable applications.

FEATURES

✧IEC61000-4-2 Level 4 ESD Protection
✧Protects one directional I/O line
✧Low clamping voltage
✧Low leakage current

MACHANICAL DATA

✧SOD-523 package
✧Flammability Rating: UL 94V-0
✧Packaging: Tape and Reel
✧High temperature soldering guaranted:260℃/10s
✧Reel size: 7 inch

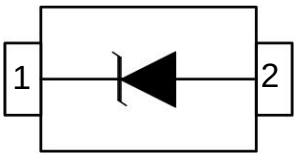
ORDERING INFORMATION

✧Package: SOD-523
✧Material: Halogen free
✧Packing: Tape & Reel
✧Quantity per reel: 3,000pcs

APPLICATIONS

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

PIN CONFIGURATION



PACKAGE OUTLINE



ABSOLUTE MAXIMUM RATING

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	±30 ±22	kV
ESD	ESD Voltage per human body model ESD Voltage per machine model	16 400	kV V
P_D	Total Power Dissipation on FR-5 Board (Note 1) @ Ta=25°C	150	mW
T_J, T_{STG}	Junction and Storage Temperature	-55/+150	°C
T_L	Lead Solder Temperature – Maximum (10 Second Duration)	260	°C

These ratings are limiting values above which the serviceability of the diode may be impaired
Note 1. FR-5=1.0x0.75x0.62 in.

ELECTRICAL CHARACTERISTICS (Tamb=25°C)

PART NUMBER	DEVICE MARKING	V_{RWM} (V)	I_R (μA)	V_B (V)	I_T (mA)	V_C (V)		V_C (V)		P_{PK} (W)	C_J (pF)
		Max	Max	Min		Max	@A	Max	@A	Max	Max
ESD5Z5.0T1G	ZF + code	5.0	0.08	6.2	1	11.6	5.0	15.0	7.0	105	80

ELECTRICAL CHARACTERISTICS CURVE

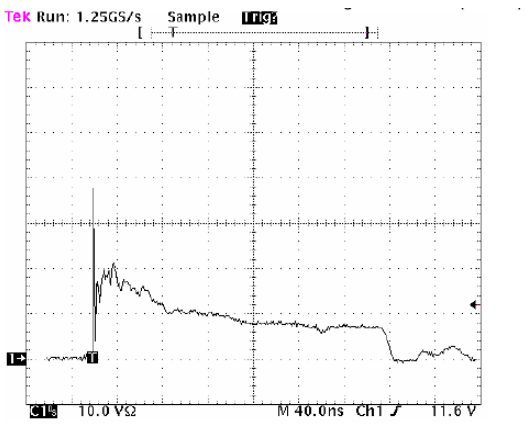


Figure 1. ESD Clamping Voltage Screenshot
Positive 8 kV contact per IEC 61000−4−2

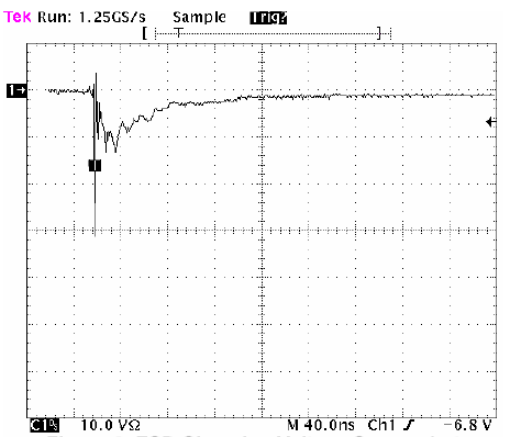
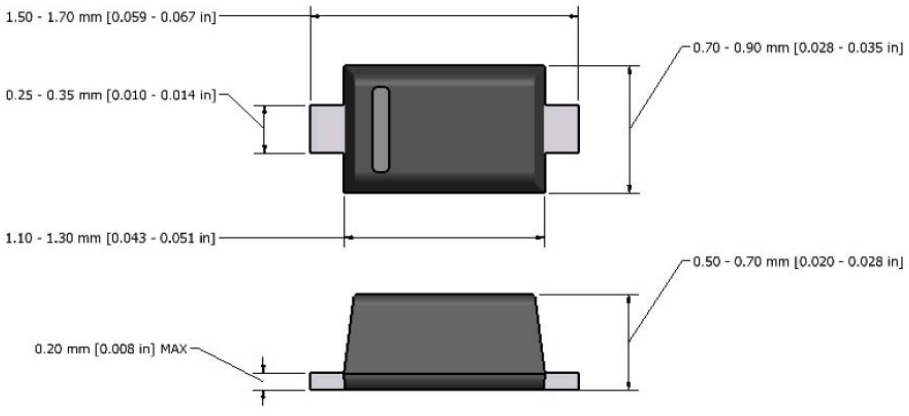


Figure 2. ESD Clamping Voltage Screenshot
Negative 8 kV contact per IEC 61000−4−2

SOD-523 PACKAGE OUTLINE DIMENSIONS



Note: Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

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Global Electronic Components Distributor

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KUU:

GBLC15CI SM712.TCT SMBJ160CA SMBJ6.0CA 1N5819W S4 ESD3V3D523-2U KNTC0603/10KF3950 LSMD150 LSMD050 MSMD050/24 SD103AWS S4 SMDJ9.0A KMOV0402E180C030T SMBJ17A SMDJ16A SMF15A K1N5819HW-7-F SJD12C15L01 MBR0540-7-F PESD12VS1UB SMDJ7.5CA 1N60PW BV03C ESD0301BU SMDJ8.5A WNM4002-3/TR ESD05V32D-LC MSMD150 SMDJ7.0A B340A