Top View

Simplified outline SOD-523 and symbol

Applications

- Computers and peripherals
- Audio and video equipment
- Cellular handsets and accessories
- 10/100/1000 Ethernet
- Local Area Network (LAN) equipment
- Communication systems
- Portable electronics
- SIM card protection

Features

- Ultra Low Capacitance 2.5 pF(Typ)
- Stand−off Voltage: 5 V
- Low Clamping Voltage
- Low Leakagecurrent
- Response Time is Typically < 1ns
- Small Body OutlineDimensions
- IEC61000−4−2 Level 4 ESD Protection
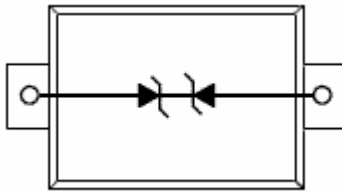
Absolute Ratings (T_{amb}=25°C)

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power (t_p = 8/20 μs)	30	W
T_L	Maximum lead temperature for soldering during 10s	260	°C
T_{stg}	Storage Temperature Range	-55 to +150	°C
T_{op}	Operating Temperature Range	-40 to +125	°C
T_j	Maximum junction temperature	150	°C
	IEC61000-4-2(ESD) airdischarge contactdischarge	±15 ±8	KV

Electrical Parameter

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T
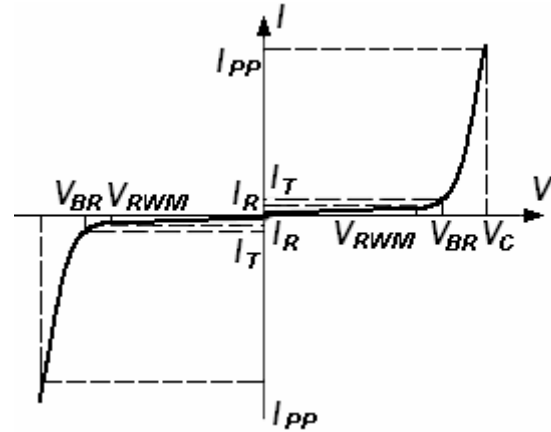
Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.VF = 0.9V at IF = 10mA

Device	Device Marking	V_{RWM} (V)	I_R(uA) @ V_{RWM}	V_{BR} (V)@ I_T (Note 1)	I_T	V_C (V) @ I_{PP}=2 A*	P_{PK} (W)*	C (pF)
		Max	Max	Min	mA	Typ	Max	Typ
ESD5LM5.0C	LB	5.0	0.2	6.0	1.0	13.0	30	2.5

*Surge current waveform per Figure 1.

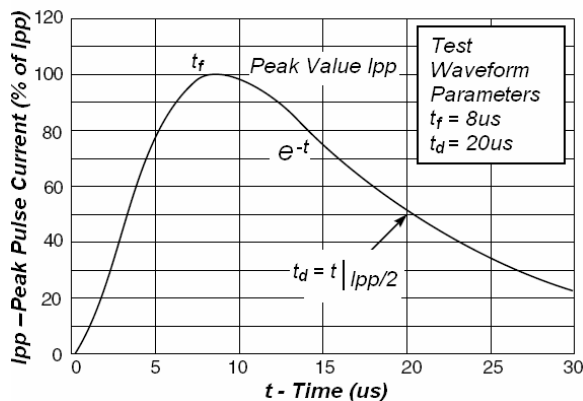1. V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25℃.
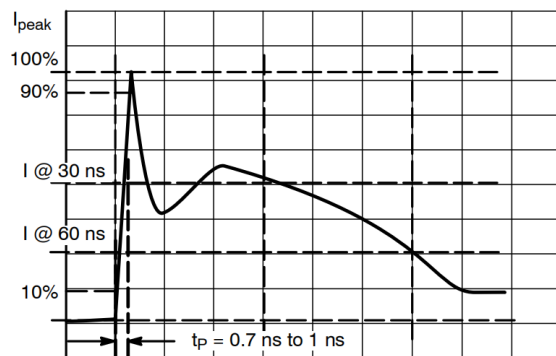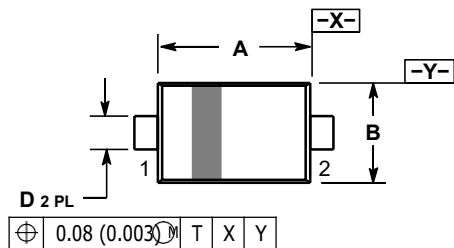
Fig1.IEC61000-4-5Waveform

Fig2.IEC61000-4-2 Waveform
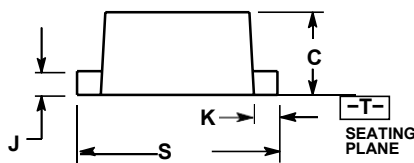
Package Outline Dimensions

SOD-523

NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH.
   MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF
   BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PRO-
   TRUSIONS, OR GATE BURRS.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.10	1.20	1.30	0.043	0.047	0.051
B	0.70	0.80	0.90	0.028	0.032	0.035
C	0.50	0.60	0.70	0.020	0.024	0.028
D	0.25	0.30	0.35	0.010	0.012	0.014
J	0.07	0.14	0.20	0.0028	0.0055	0.0079
K	0.15	0.20	0.25	0.006	0.008	0.010
S	1.50	1.60	1.70	0.059	0.063	0.067

SOLDERING FOOTPRINT*

$\dfrac{1.40}{0.0547}$

$\dfrac{0.40}{0.0157}$

$\dfrac{0.40}{0.0157}$

SCALE 10:1 $\left(\dfrac{mm}{inches}\right)$
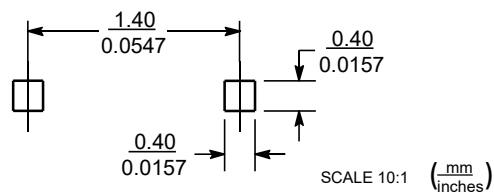
X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for ESD Suppressors / TVS Diodes *category:*

Click to view products by TWGMC *manufacturer:*

Other Similar products are found below :

NTE4902 P4SMAJ15A P4SMAJ26A SMAJ400CA-TP TGL34-47CA ESDAULC45-1BF4 SM1605E3/TR13 SMF20A-TP P4SMAJ12A CPDUR24V-HF CPDQC5V0USP-HF CPDQC5V0-HF MPLAD30KP45CAE3 MMBZ27VCLQ-7-F MMAD1108/TR13 MPLAD30KP24A ACPDQC5V0R-HF DFLT170A-7 NTE4900 NTE4926 NTE4938 SMF22A-TP SMF12A-TP SLVU2.8-TP SMLJ6.5CA-TP SMAJ6.5CA-TP MMAD1108E3/TR13 D5V0M1U2LP3-7 SMAJ400A-TP AOZ8811DT-03 AOZ8831DI-05 AOZ8831DT-03 SMAJ188CA 3SMC33CA BK CPDQC3V3C-HF CPDQC12VE-HF MPLAD30KP170CA 82357120100 5.0SMLJ15CA-TP 5KP18A-TP P6KE8.2A-TP MPLAD30KP43CAE3 SMAJ43A-TP D5V0F6U8LP33-7 TVS5501V10MUT5G 5.0SMLJ24CA-TP SMAJ110CA-TP MPLAD15KP75CAE3 MMAD1103e3/TR13 DFLT40AQ-7