



SOD-523 SURFACE MOUNT

Very Small Outline Flat Lead Plastic Package

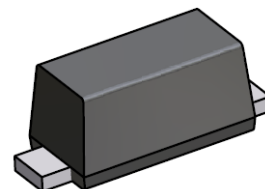
Transient Voltage Suppressors

ESD Protection Diodes

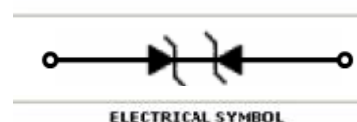
Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{pp}	IEC61000-4-2(ESD) Air Contact	± 15 ± 8	KV
ESD	Per Human Body Model	16	KV
P_D	Power Dissipation (Note 1)	150	mW
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	+150	$^\circ\text{C}$
T_L	Max Lead Solder Temperature range (10 Second Duration)	260	$^\circ\text{C}$

These ratings are limiting values above which the serviceability of the diode may be impaired.
Note 1. FR-5 = 1.0 x 0.75 x 0.62 in.



SOD-523 Flat Lead



Specification Features:

- Stand-off Voltage: 5V0
- Low Leakage
- Response Time is Typically < 1ns
- IEC61000-4-2 Level 4 ESD Protection
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish

DEVICE MARKING CODES:

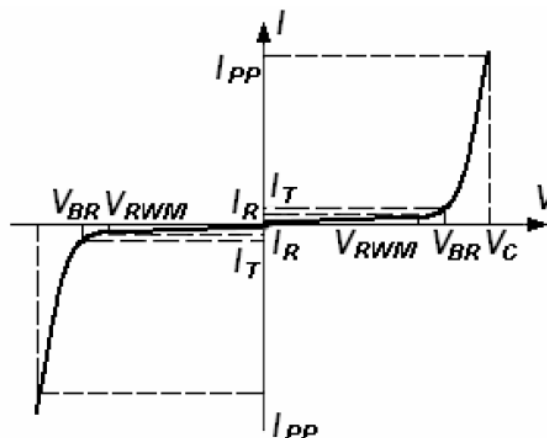
Device Type	Device Marking
ESD5Z5V0C	5C

Packing SOD-523:

- Quantity per reel : 3,000pcs

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 ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Device Type	V_{RWM} (Volts)	I_R @ V_{RWM} (μA)	V_{BR} @ I_T (Note 2) (Volts)		I_T (mA)	I_{PP+} (A)	V_C @ Max I_{PP+} (Volts)	P_{PK+} (W)	C @ $V_R = 0V$, $f = 1\text{MHz}$ (pF)
	Max	Max	Min	Max		Max	Max	Max	Typ.
ESD5Z5V0C	5.0	1	5.6	7.8	1.0	4	12	48	15

+ Surge current waveform per Figure 1.

Note 2: V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C .

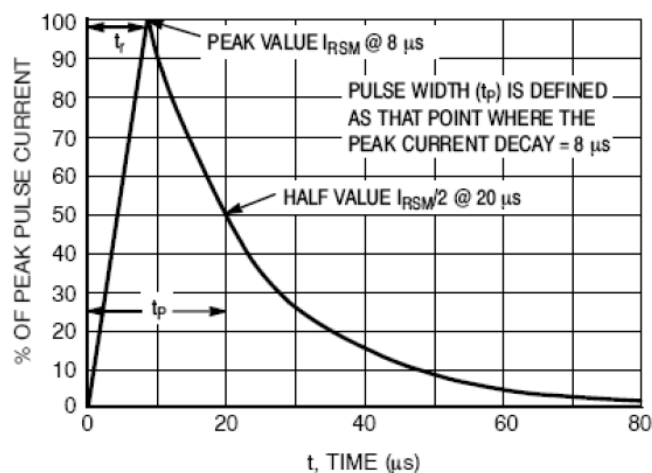
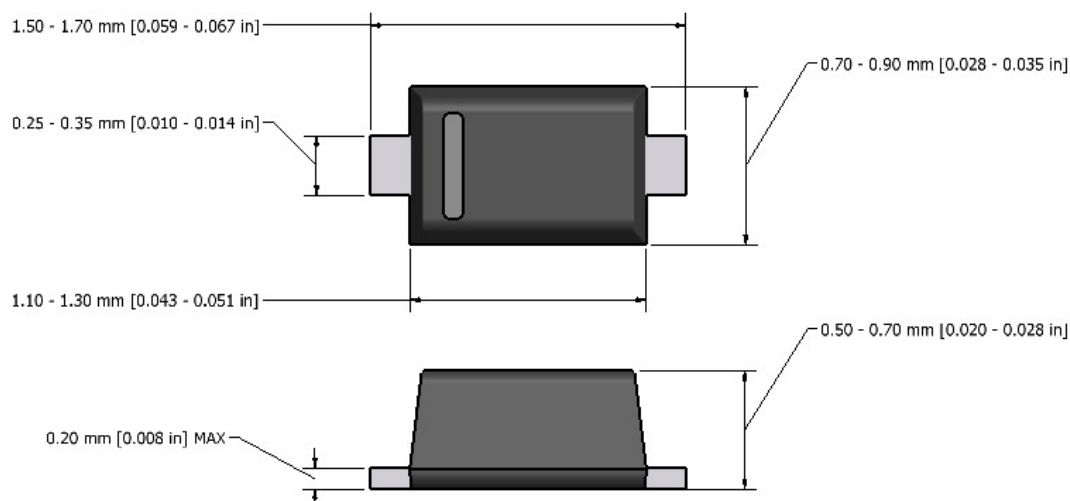
SURGE CURRENT WAVEFORM:


Figure 1. 8 x 20 μs Pulse Waveform

Ordering Information

Device	Package	Shipping
ESD5Z5V0C	SOD523	Tape & Reel 5000pcs

Flat Lead SOD-523 Package Outline


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