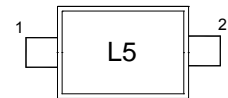
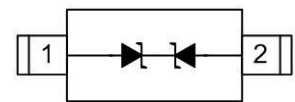


**● FEATURES**

- 1) Ultra Low Capacitance 0.5 pF
- 2) Low Clamping Voltage
- 3) Small Body Outline Dimensions
- 4) Stand-off Voltage: 5 V
- 5) Low Leakage
- 6) Response Time is Typically < 1.0 ns
- 7) IEC61000-4-2 Level 4 ESD Protection
- 8) We declare that the material of product compliant with RoHS requirements and Halogen Free.

**● MECHANICAL CHARACTERISTICS:**

CASE: Void-free, transfer-molded, thermosetting plastic Epoxy Meets UL 94 V-0  
 LEAD FINISH: 100% Matte Sn (Tin)

**SOD-523**

**PIN Diagram**

**● MAXIMUM RATINGS(Ta = 25°C)**

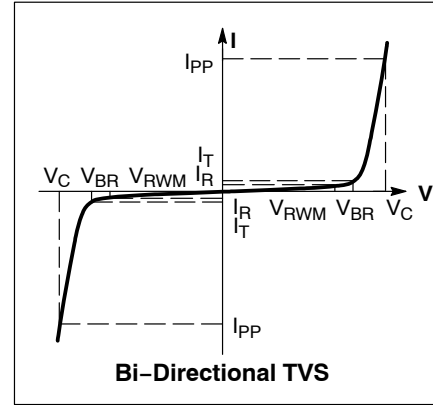
Parameter	Symbol	Limits	Unit
IEC 61000-4-2 (ESD) Contact Air		±8	kV
Total Device Dissipation, FR-5 Board (Note 1) @ T <sub>A</sub> = 25°C	P <sub>D</sub>	200	mW
Junction Temperature Range	T <sub>J</sub>	-55 ~ +125	°C
Storage temperature Range	T <sub>stg</sub>	-55 ~ +150	°C
Lead Solder Temperature - Maximum (10 Second Duration)	T <sub>L</sub>	260	°C

1. FR-5 = 1.0 x 0.75 x 0.62 in.

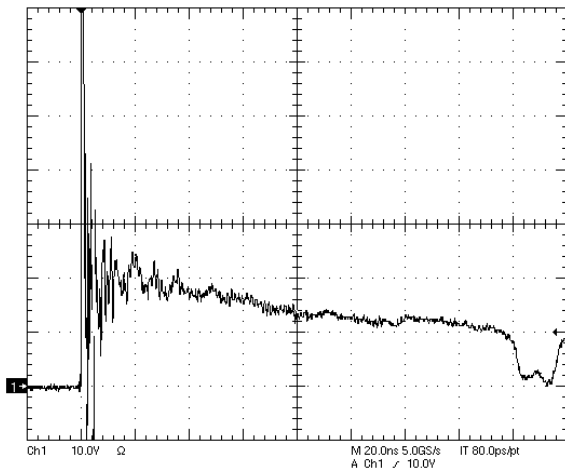
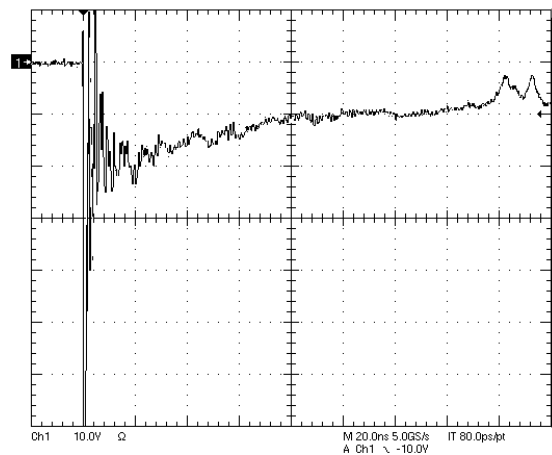
**ELECTRICAL CHARACTERISTICS**

 (T<sub>A</sub> = 25°C unless otherwise noted)

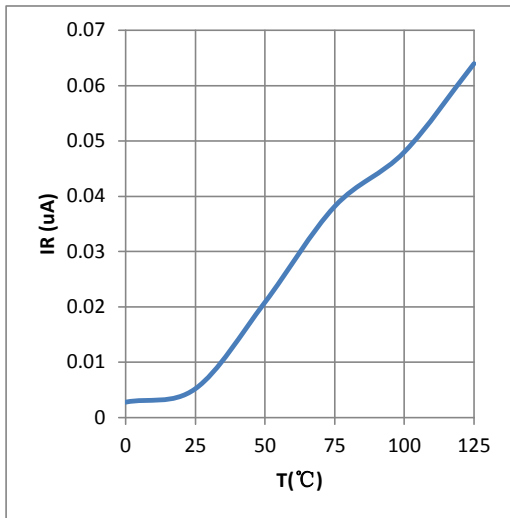
Symbol	Parameter
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current
V <sub>C</sub>	Clamping Voltage @ I <sub>PP</sub>
V <sub>RWM</sub>	Working Peak Reverse Voltage
I <sub>R</sub>	Maximum Reverse Leakage Current @ V <sub>RWM</sub>
V <sub>BR</sub>	Breakdown Voltage @ I <sub>T</sub>
I <sub>T</sub>	Test Current
I <sub>F</sub>	Forward Current
V <sub>F</sub>	Forward Voltage @ I <sub>F</sub>
P <sub>pk</sub>	Peak Power Dissipation
C	Capacitance @ V <sub>R</sub> = 0 and f = 1.0 MHz


**● ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

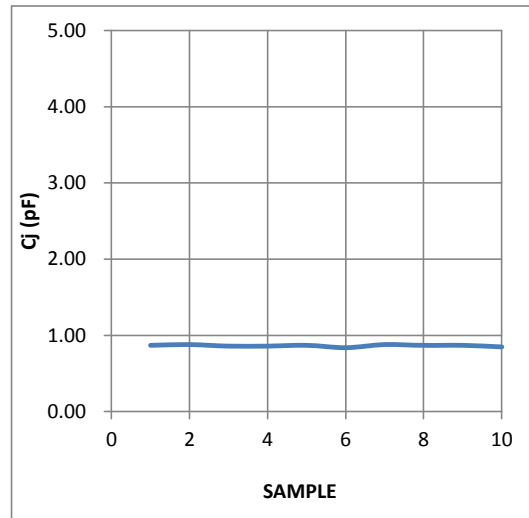
Device	Device Marking	V <sub>RWM</sub> (V)	I <sub>R</sub> (u A) @ V <sub>RWM</sub>	V <sub>BR</sub> (V) @ I <sub>T</sub> (Note 2)	I <sub>T</sub> mA	C (pF)		V <sub>C</sub> (V) @ I <sub>PP</sub> = 1 A	VC
		Max	Max	Min		Typ	Max	Max	
PESDUC5D5VB	L5	5	1	5.4	1	0.5	0.9	12.9	Per IEC61000-4-2 See Below

 2. VBR is measured with a pulse test current I<sub>T</sub> at an ambient temperature of 25°C.

**Figure 1. ESD Clamping Voltage Screenshot Positive 8 kV Contact per IEC61000-4-2**

**Figure 2. ESD Clamping Voltage Screenshot Negative 8 kV Contact per IEC61000-4-2**

**ELRCTRICAL CHARACTERISTICS CURVES**



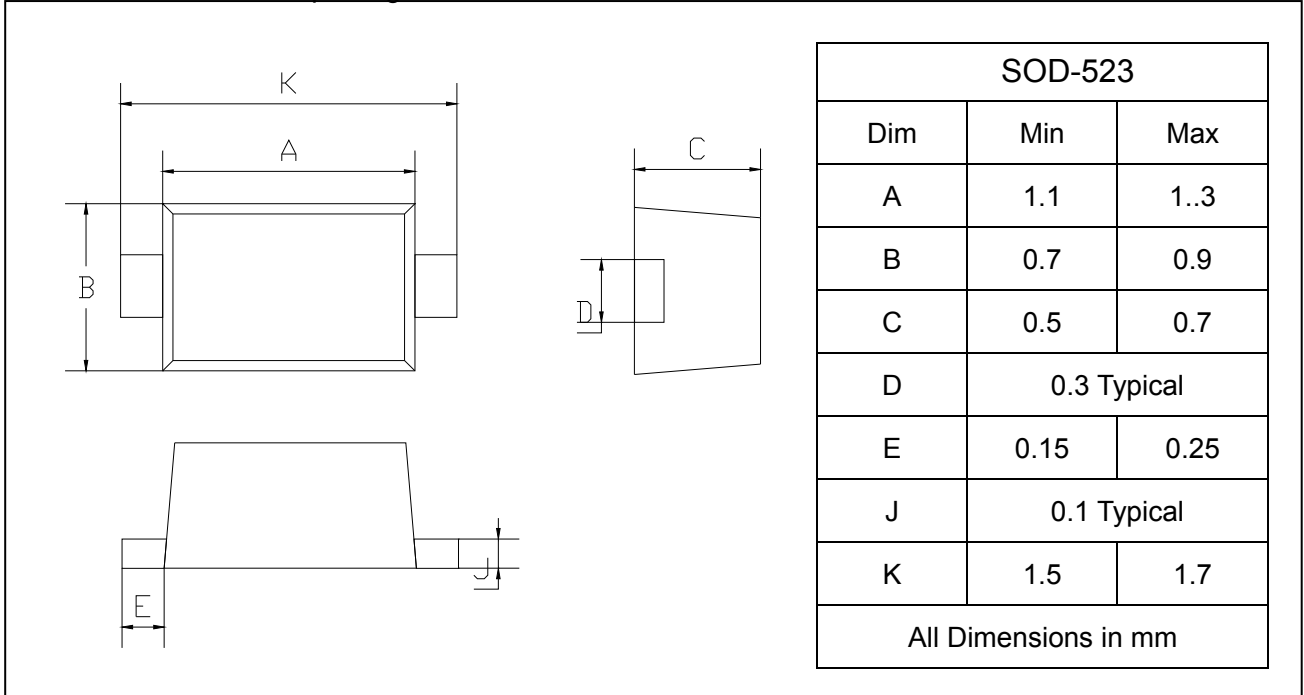
**Fig 3. Reverse character**



**Fig 4. Capacitance character**

Plastic surface mounted package

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SOLDERING FOOTPRINT

