

## Features

- Ultra low capacitance: 0.35pF typical
- Ultra low leakage: nA level
- Low operating voltage: 5V
- Low clamping voltage
- 2-pin leadless package
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    - Air discharge:  $\pm 20\text{kV}$
    - Contact discharge:  $\pm 15\text{kV}$
  - IEC61000-4-5 (Lightning) 3.5A (8/20 $\mu\text{s}$ )

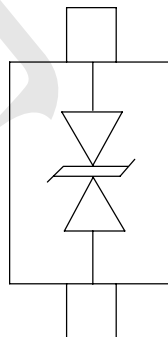
## Mechanical Characteristics

- Package: SOD-523(0603)
- Lead Finish: NiPdAu
- Case Material: “Green” Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Shipping Qty :3000/7Inch Tape & Reel

## Applications

- Smart phones
- Display Ports
- MDDI Ports
- USB Ports
- Digital Video Interface (DVI)

## Dimensions and Pin Configuration



**Marking:L5.ꞯ**

**Absolute Maximum Ratings** (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	80	W
Peak Pulse Current (8/20μs)	IPP	3.5	A
ESD per IEC 61000-4-2 (Air)	VESD	±20	kV
ESD per IEC 61000-4-2 (Contact)		±15	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

**Electrical Characteristics** (TA=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	VRWM				5.0	V
Breakdown Voltage	VBR	IT = 1mA	6.0	7.5	8.5	V
Reverse Leakage Current	IR	VRWM = 5.0V			200	nA
Clamping Voltage	VC	IPP = 1A (8 x 20μs pulse)			12	V
Clamping Voltage	VC	IPP = 3.5A (8 x 20μs pulse)			20	V
Junction Capacitance	CJ	VR = 0V, f = 1MHz		0.35	0.4	pF

**Typical Performance Characteristics ( $T_A=25^\circ\text{C}$  unless otherwise Specified)**

Fig1. 8/20 $\mu\text{s}$  Pulse Waveform

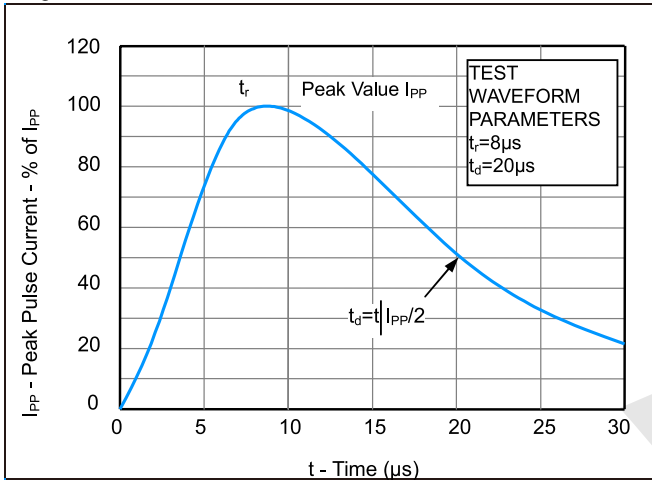


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

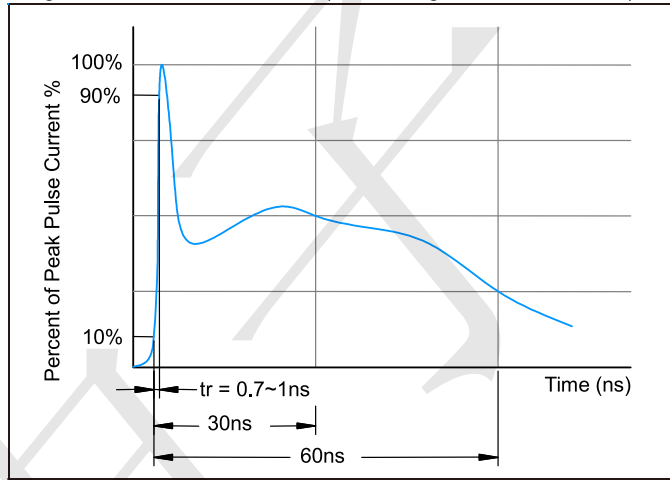
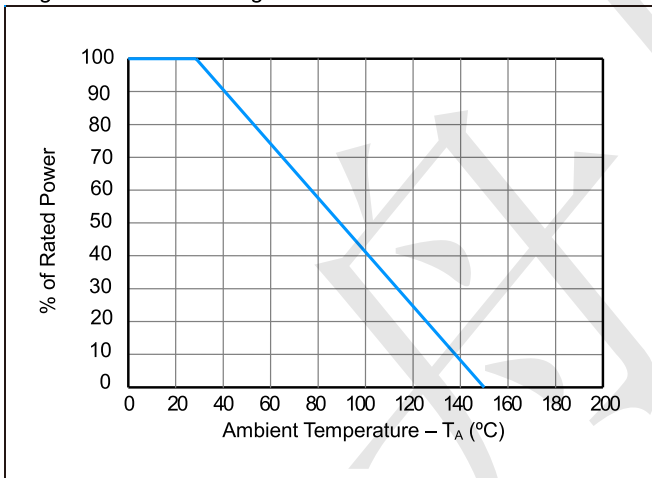
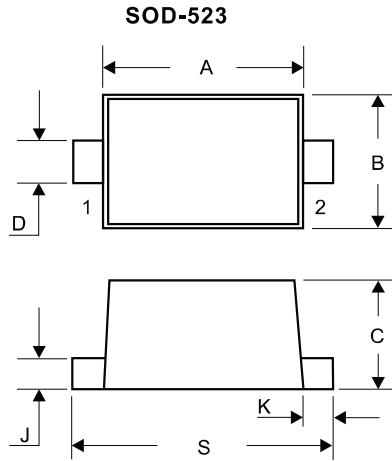


Fig3. Power Derating Curve



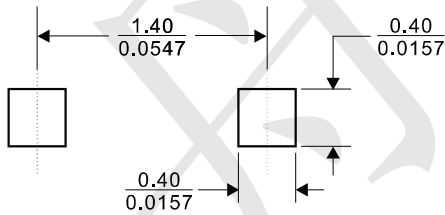
### Outline Drawing - SOD-523 (0603)



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	1.10	1.30	0.043	0.051
B	0.70	0.90	0.028	0.035
C	0.50	0.70	0.020	0.028
D	0.25	0.35	0.010	0.014
J	0.07	0.20	0.0028	0.0079
K	0.15	0.25	0.006	0.010
S	1.50	1.70	0.059	0.067

### Land Pattern - SOD-523 (0603)

#### Recommended Mounting Pad Layout



Dimensions in (  $\frac{\text{millimeters}}{\text{inches}}$  )

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