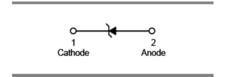
# Surface Mount Zener Diode







#### Features:

- · Planar Die Construction
- 500mW Power Dissipation
- · General Purpose, Medium Current
- · Ideally Suited for Automated Assembly Processes



SOD-123

### **Applications:**

- Zener diode
- · Ultra-small surface mount package

## Maximum Rating @ TA = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward voltage @ I <sub>F</sub> =10mA	$V_{F}$	0.9	V
Power dissipation	$P_d$	500	mW
Thermal resistance, junction to ambient air	$R_{ hetajA}$	350	°C/W
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature range	T <sub>stg</sub>	-65 to +150	°C

**Note :** Device mounted on ceramic PCB; 7.6mm  $\times$  9.4mm  $\times$  0.87mm with pad areas 25mm<sup>2</sup>. Tested with pulses, Tp  $\leq$  1ms.

### Electrical Characteristics @ TA = 25°C unless otherwise specified

		Zener Voltage Range		Test Current	Maximum Zener Impedance		Maximum Reverse Leakage Current		
Type Number	Type Code		V <sub>z</sub> @I <sub>ZT</sub>		I <sub>ZT</sub>	Z <sub>ZT</sub> @I <sub>ZT</sub>	Z <sub>ZK</sub> @I <sub>ZK</sub> = 0.25mA	I <sub>R</sub>	@V <sub>R</sub>
		Nom(V)	Min(V)	Max(V)	mA		Ω	μΑ	V
MMSZ5251B	K1	22	20.9	23.1	5.6	29	600	0.1	17

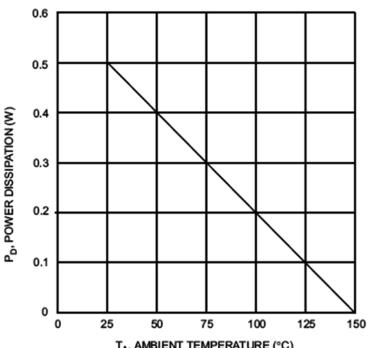
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# Surface Mount Zener Diode



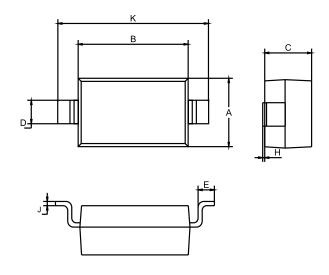
## Typical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified



T<sub>A</sub>, AMBIENT TEMPERATURE (°C) Fig. 1 Power Dissipation vs Ambient Temperature

### **Package Outline**

Plastic surface mounted package



SOD-123				
Dim	Min Max			
Α	1.4	1.8		
В	2.55 2.85			
C	1.15 Typical			
D	0.5	0.6		
E	0.3	0.4		
Н	0.02	0.10		
J	0.1 Typical			
K	3.55	3.85		
All Dimensions in mm				

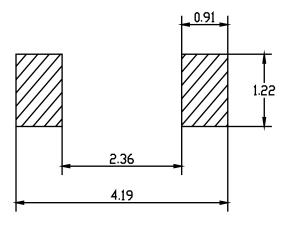
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## Surface Mount Zener Diode



## **Soldering Footprint**



Dimensions: Millimetres

## **Package Information**

Device	Package	Shipping
MMSZ5251B-7-F	SOD-123	3,000/Tape & Reel

#### **Part Number Table**

Description	Part Number	
Surface Mount Zener Diode	MMSZ5251B-7-F	

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