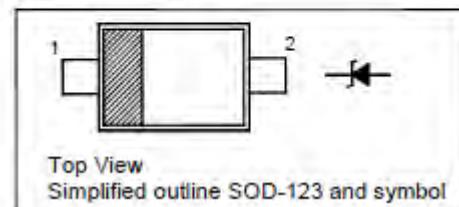


Features

- Total power dissipation: Max. 500 mW
- Small plastic package suitable for surface mounted design
- Tolerance approximately $\pm 5\%$

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{Stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	350	$^\circ\text{C/W}$
Forward Voltage at $I_F = 10 \text{ mA}$	V_F	0.9	V

Characteristics at $T_a = 25^\circ\text{C}$

Type	Marking Code	Zener Voltage Range ¹⁾			Dynamic Impedance ²⁾			Reverse Current	
		V_{znom} V	I_{ZT} for V_{ZT}		Z_{ZT} Ω (Max.)	Z_{ZK} Ω (Max.)	at I_{ZK} mA	I_R μA (Max.)	at V_R V
			mA	V					
MMSZ5231B	E1	5.1	20	4.85...5.36	17	1600	0.25	5	2

¹⁾ V_Z is tested with pulses (20 ms)

²⁾ Z_{ZT} and Z_{ZK} are measured by dividing the AC voltage drop across the device by the AC current applied. The specified limits are for $I_{Z(AC)} = 0.1 I_{Z(DC)}$ with the AC frequency = 1 KHz.

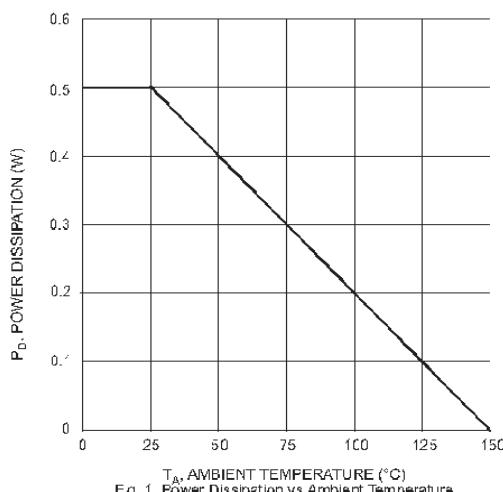


Fig. 1 Power Dissipation vs Ambient temperature

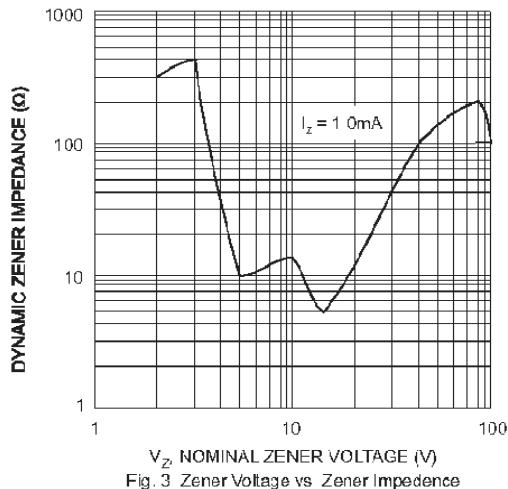


Fig. 3 Zener Voltage vs Zener Impedance

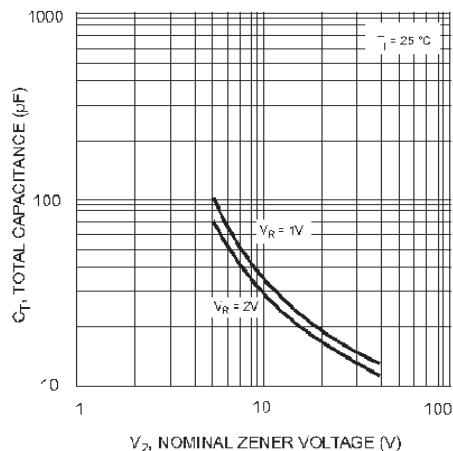


Fig. 2 Total Capacitance vs Nominal Zener Voltage

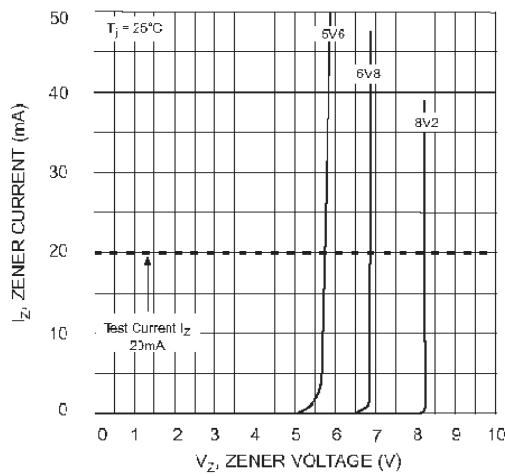
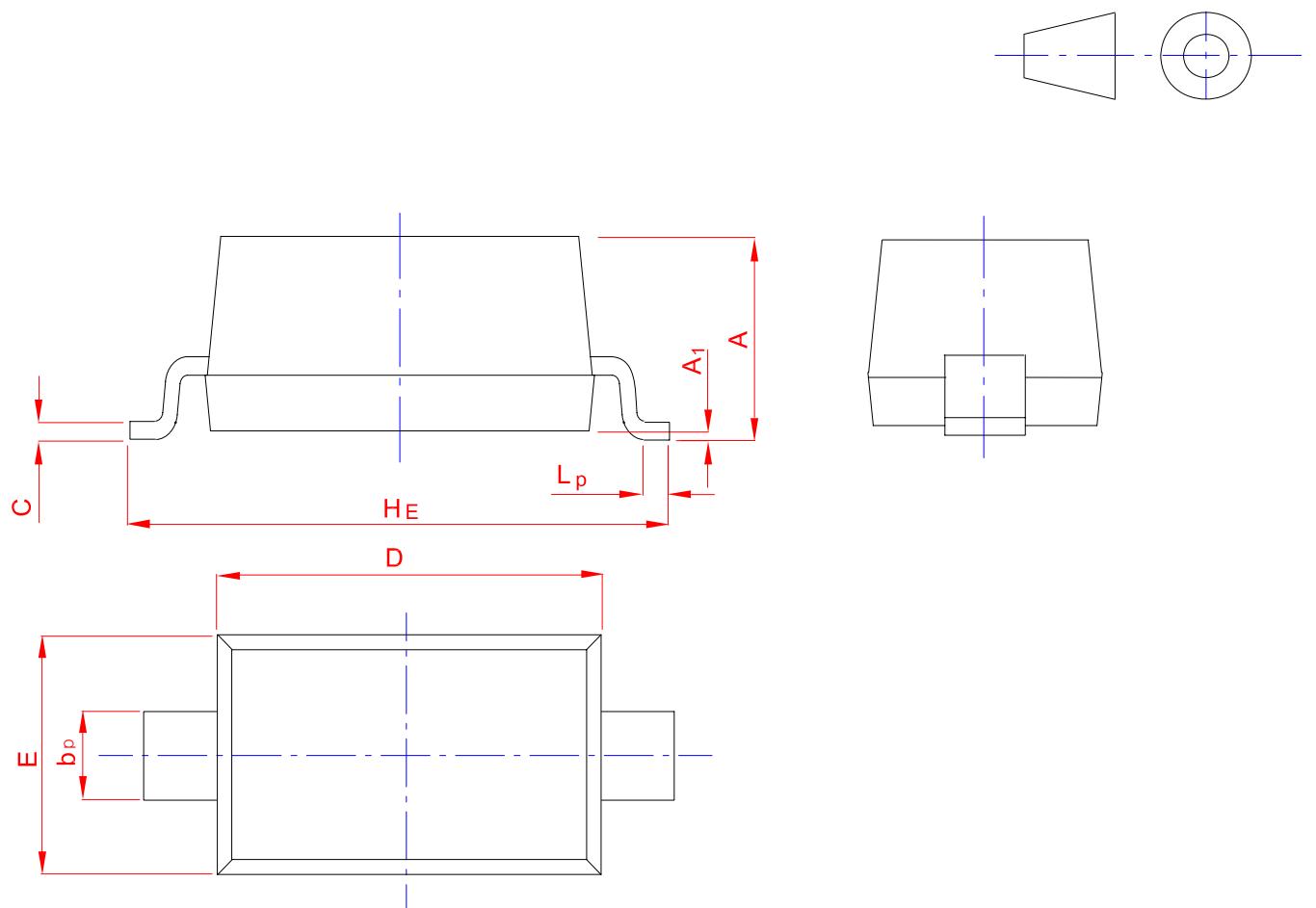


Fig. 4 Zener Breakdown Characteristics

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b _p	C	D	E	H _E	A ₁	L _p
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20