



Surface Mount Zener Diode



Zener Voltage - 5.6V

Description

- Surface Device Type Mounting
- Low Zener Impedance
- Power Dissipation of 300mW
- High Stability and High Reliability

Mechanical Data

- Case: SOT23 Package
- Case Material: "Green" Molding Compound UL Flammability Classification Rating 94V-0
- Terminals: Matte tin plated, solderable per MIL-STD-750, method 2026
- Component in accordance to RoHS
- Halogen Free

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

Ordering Information

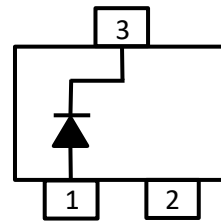
- Package :SOT23
- Reel Size :7 (inches)
- Quantity Per Reel :3,000/Tape & Reel
- Quantity One Box :45,000/Tape & Reel

Package Outline

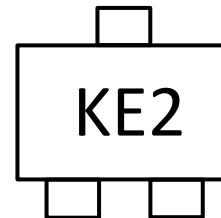


SOT23 Top View

Device Schematic & PIN Configuration



Product Type Marking Code



Maximum Ratings (@TA = +25°C, unless otherwise specified.)

Absolute Ratings

Parameter	Symbol	Value	Unit
Forward Voltage @ IF = 10mA	V _F	0.9 ⁽¹⁾	V
Power Dissipation	P _D	500 ⁽²⁾	mW
Storage Temperature Range	T _{STG}	-65 to +150	°C
Thermal Resistance from Junction to Ambient	R _{θJA}	417 ⁽³⁾	°C/W
Thermal Resistance from Junction to Lead	R _{θJL}	150 ⁽³⁾	°C/W

Electrical Characteristics

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Zener Voltage Range	V _Z @I _{ZT}	V _Z	5.32	–	5.88	V
Zener Impedance	Z _{ZT} @I _{ZT}	Z _{ZT}	–	–	11	Ω
Zener Impedance	Z _{ZK} @I _{ZK}	Z _{ZK}	–	–	1600	Ω
Reverse Leakage Current	I _R @V _R	I _R	–	–	5	uA

Note:1. Short duration test pulse used to minimize self-heating effect

2. Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm²

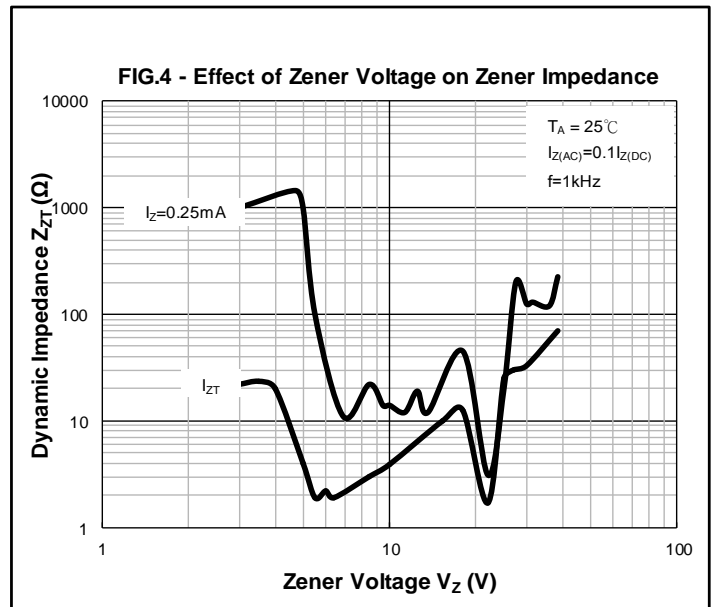
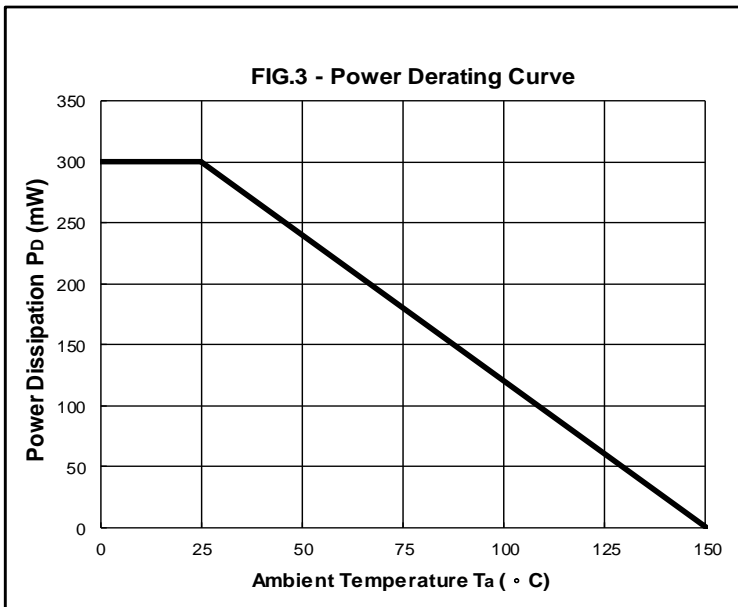
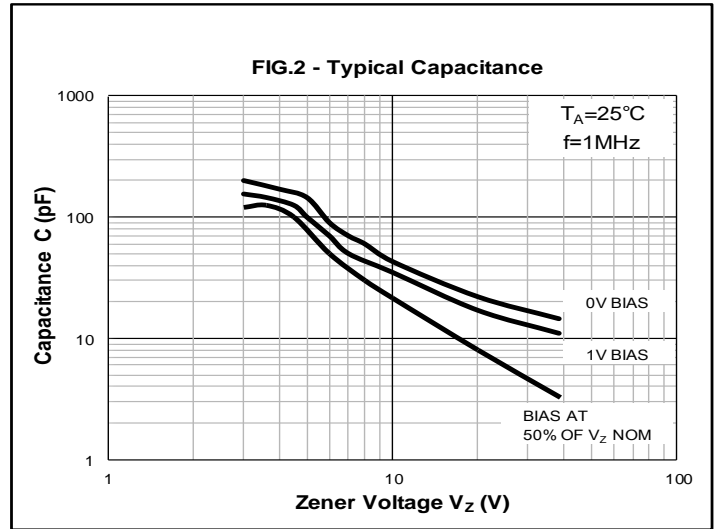
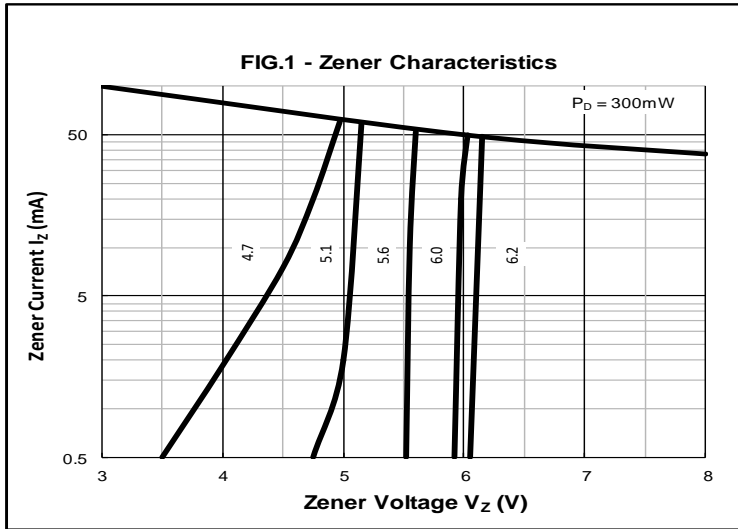
3. Thermal Resistance measurement obtained via infrared Scan Method.

MMBZ5232B-7-99-01-BC1589

Rev-0, 2-Dec-2022

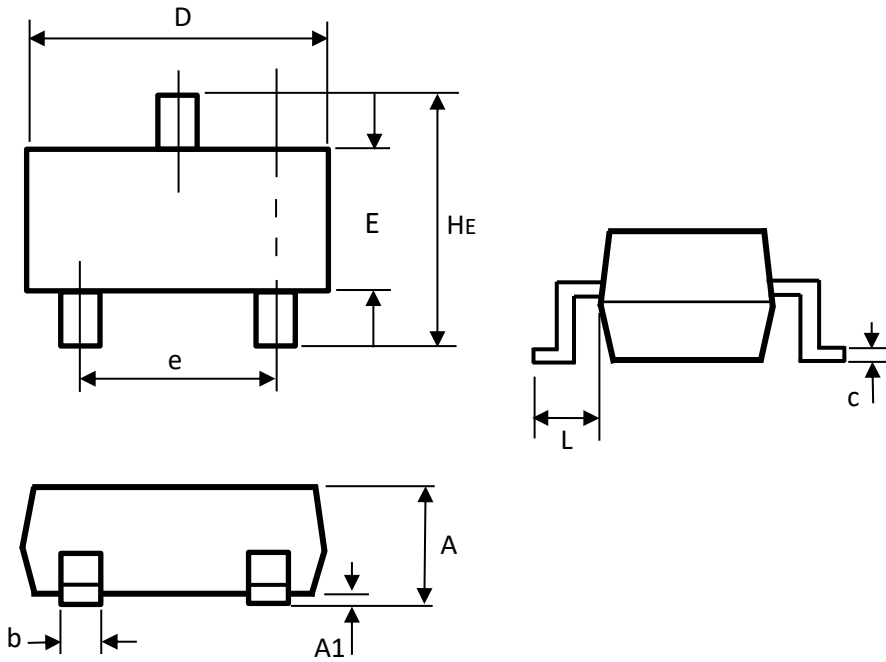


Rating and Characteristic Curves



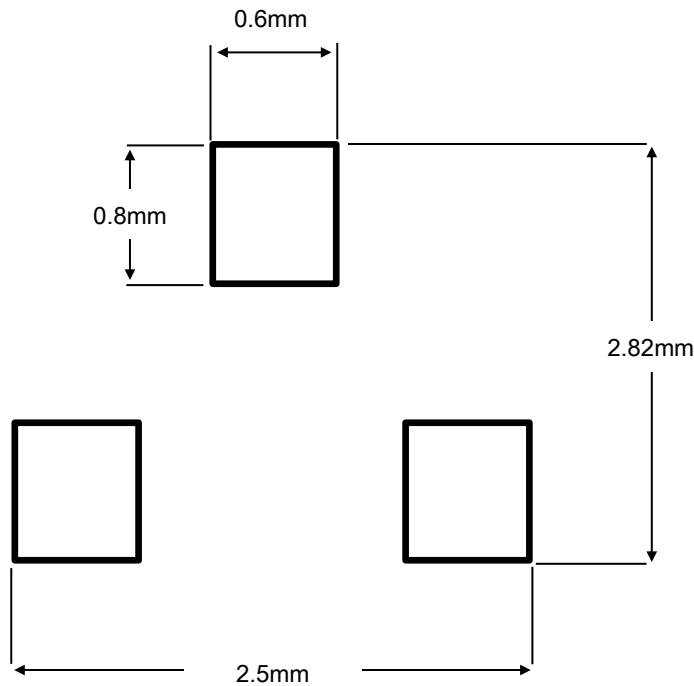


Package Outline Dimensions



SOT23 Package		
Dim	Min	Max
A	0.90	1.15
A1	0.00	0.10
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
e	1.80	2.00
L	0.55 REF	
HE	2.25	2.55
All Dimensions in mm		

Suggested Soldering Pad Layout



Note:

- 1.The pad layout is for reference purposes only.
- 2.General tolerance $\pm 0.05\text{mm}$



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