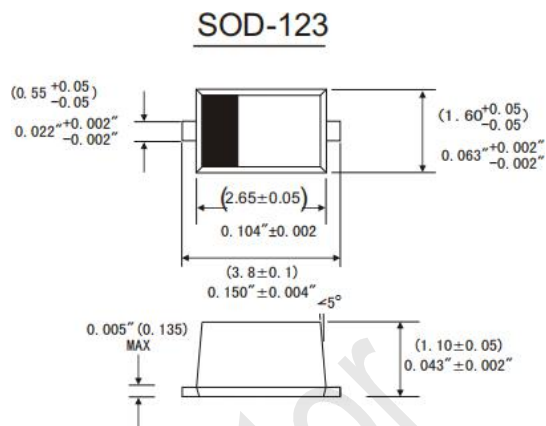


FEATURES

- ◆ Total power dissipation: Max. 500mW.
- ◆ Wide zener reverse voltage range 2.0V to 75V.
- ◆ Small plastic package suitable for surface mounted design.
- ◆ Tolerance approximately $\pm 5\%$

MECHANICAL DATA

- ◆ Case: SOD-123W
- ◆ Weight: 0.01 gram



Absolute Maximum Ratings And Characteristics (Ta = 25 °C)

| Parameter | Symbol | Value | Unit |
|---|-----------------|------------|-----------------------------|
| Power Dissipation | P_{tot} | 500 | mW |
| Forward Voltage at $I_F = 10 \text{ mA}$ | V_F | 0.9 | V |
| Typical thermal resistance junction to ambient ⁽¹⁾ | $R_{\theta JA}$ | 340 | $^{\circ}\text{C}/\text{W}$ |
| Operating and Storage Temperature Range | T_J, T_{stg} | -55 ~ +150 | $^{\circ}\text{C}$ |

Fig.1 Maximum Continuous Power Derating

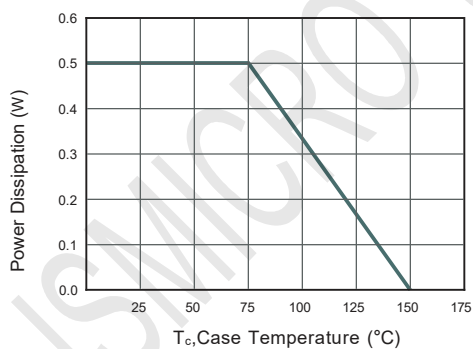
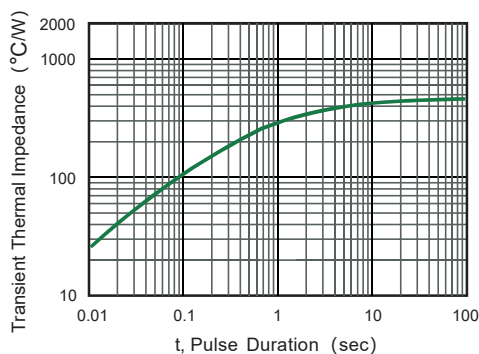


Fig.2 Typical Transient Thermal Impedance



Characteristics at Ta = 25°C

| Type | Marking | Zener Voltage Range ⁽¹⁾ | | | I _{ZT} (mA) | Dynamic Impedance Z _{zT} (at I _{ZT}) Max (Ω) | Reverse Current | |
|----------|---------|---------------------------------------|---------|---------|-------------------------|---|----------------------------|--------------------------|
| | | V _{ZT} (at I _{ZT}) | | | | | I _R Max (μA) | at V _R (V) |
| | | Min (V) | Nom (V) | Max (V) | | | | |
| MM1Z2V0W | 4A | 1.8 | 2.0 | 2.1 | 5 | 100 | 120 | 0.5 |
| MM1Z2V2W | 4B | 2.08 | 2.2 | 2.3 | 5 | 100 | 120 | 0.7 |
| MM1Z2V4W | 4C | 2.28 | 2.4 | 2.5 | 5 | 100 | 120 | 1.0 |
| MM1Z2V7W | 4D | 2.5 | 2.7 | 2.9 | 5 | 110 | 120 | 1.0 |
| MM1Z3V0W | 4E | 2.8 | 3.0 | 3.2 | 5 | 120 | 50 | 1.0 |
| MM1Z3V3W | 4F | 3.1 | 3.3 | 3.5 | 5 | 130 | 20 | 1.0 |
| MM1Z3V6W | 4H | 3.4 | 3.6 | 3.8 | 5 | 130 | 10 | 1.0 |
| MM1Z3V9W | 4J | 3.7 | 3.9 | 4.1 | 5 | 130 | 5 | 1.0 |
| MM1Z4V3W | 4K | 4.0 | 4.3 | 4.6 | 5 | 130 | 5 | 1.0 |
| MM1Z4V7W | 4M | 4.4 | 4.7 | 5.0 | 5 | 130 | 2 | 1.0 |
| MM1Z5V1W | 4N | 4.8 | 5.1 | 5.4 | 5 | 130 | 2 | 1.5 |
| MM1Z5V6W | 4P | 5.2 | 5.6 | 6.0 | 5 | 80 | 1 | 2.5 |
| MM1Z6V2W | 4R | 5.8 | 6.2 | 6.8 | 5 | 50 | 1 | 3.0 |
| MM1Z6V8W | 4X | 6.4 | 6.8 | 7.2 | 5 | 30 | 0.5 | 3.5 |
| MM1Z7V5W | 4Y | 7.0 | 7.5 | 7.9 | 5 | 30 | 0.5 | 4.0 |
| MM1Z8V2W | 4Z | 7.7 | 8.2 | 8.7 | 5 | 30 | 0.5 | 5.0 |
| MM1Z9V1W | 5A | 8.5 | 9.1 | 9.6 | 5 | 30 | 0.5 | 6.0 |
| MM1Z10W | 5B | 9.4 | 10 | 10.6 | 5 | 30 | 0.1 | 7.0 |
| MM1Z11W | 5C | 10.4 | 11 | 11.6 | 5 | 30 | 0.1 | 8.0 |
| MM1Z12W | 5D | 11.4 | 12 | 12.7 | 5 | 35 | 0.1 | 9.0 |
| MM1Z13W | 5E | 12.4 | 13 | 14.1 | 5 | 35 | 0.1 | 10 |
| MM1Z15W | 5F | 13.8 | 15 | 15.6 | 5 | 40 | 0.1 | 11 |
| MM1Z16W | 5H | 15.3 | 16 | 17.1 | 5 | 40 | 0.1 | 12 |
| MM1Z18W | 5J | 16.8 | 18 | 19.1 | 5 | 45 | 0.1 | 13 |
| MM1Z20W | 5K | 18.8 | 20 | 21.2 | 5 | 50 | 0.1 | 15 |
| MM1Z22W | 5M | 20.8 | 22 | 23.3 | 5 | 55 | 0.1 | 17 |
| MM1Z24W | 5N | 22.8 | 24 | 25.6 | 5 | 60 | 0.1 | 19 |
| MM1Z27W | 5P | 25.1 | 27 | 28.9 | 5 | 70 | 0.1 | 21 |
| MM1Z30W | 5R | 28 | 30 | 32 | 5 | 80 | 0.1 | 23 |
| MM1Z33W | 5X | 31 | 33 | 35 | 5 | 80 | 0.1 | 25 |
| MM1Z36W | 5Y | 34 | 36 | 38 | 5 | 90 | 0.1 | 27 |
| MM1Z39W | 5Z | 37 | 39 | 41 | 2.5 | 100 | 2 | 30 |
| MM1Z43W | 6A | 40 | 43 | 46 | 2.5 | 130 | 2 | 33 |
| MM1Z47W | 6B | 44 | 47 | 50 | 2.5 | 150 | 2 | 36 |
| MM1Z51W | 6C | 48 | 51 | 54 | 2.5 | 180 | 1 | 39 |
| MM1Z56W | 6D | 52 | 56 | 60 | 2.5 | 180 | 1 | 43 |
| MM1Z62W | 6E | 58 | 62 | 66 | 2.5 | 200 | 0.2 | 47 |
| MM1Z68W | 6F | 64 | 68 | 72 | 2.5 | 250 | 0.2 | 52 |
| MM1Z75W | 6H | 70 | 75 | 79 | 2.5 | 300 | 0.2 | 57 |