

MM1Z4689 - MM1Z4717

V_Z : 5.1 to 43 V

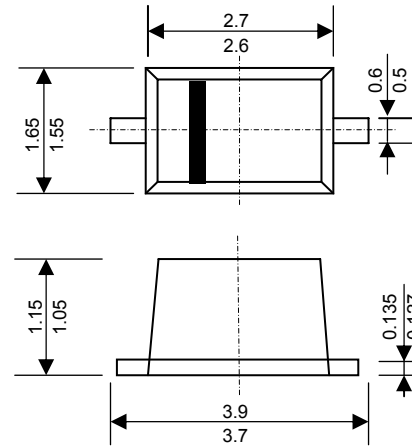
P_D : 500 mW

FEATURES :

- * Total Power Dissipation 500 mW
- * Wide Zener Reverse Voltage Range 5.1 V to 43 V
- * Package Designed for Optimal Automated Board Assembly
- * Small Package Size for High Density Applications
- * Pb / RoHS Free

ZENER DIODES

SOD-123



Dimensions in millimeters

MECHANICAL DATA :

- * Case : SOD-123
- * Weight : 0.01 gram (approximately)

Absolute Maximum Ratings (Ta = 25 °C)

| Parameter | Symbol | Value | Unit |
|--|-----------|--------------|------|
| Total Power Dissipation | P_D | 500 | mW |
| Maximum Forward Voltage at $I_F = 10$ mA | V_F | 0.9 | V |
| Junction Temperature | T_J | 150 | °C |
| Storage Temperature Range | T_{STG} | -55 to + 150 | °C |

ELECTRICAL CHARACTERISTICS ($T_a = 25\text{ }^\circ\text{C}$)

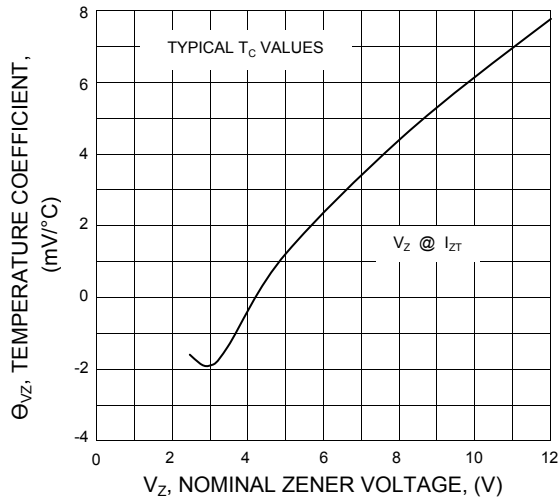
| Type No. | Marking | Zener Voltage ⁽¹⁾ | | | Test Current | Maximum Reverse Leakage Current | |
|----------|---------|------------------------------|------|-------|-------------------|---------------------------------|-------------|
| | | $V_Z @ I_{ZT}$ (V) | | | | I_{ZT} | $I_R @ V_R$ |
| | | Min. | Nom. | Max. | (μA) | (μA) | (V) |
| MM1Z4689 | BX | 4.85 | 5.1 | 5.36 | 50 | 10 | 3.0 |
| MM1Z4690 | BY | 5.32 | 5.6 | 5.88 | 50 | 10 | 4.0 |
| MM1Z4691 | BZ | 5.89 | 6.2 | 6.51 | 50 | 10 | 5.0 |
| MM1Z4692 | CA | 6.46 | 6.8 | 7.14 | 50 | 10 | 5.1 |
| MM1Z4693 | CB | 7.13 | 7.5 | 7.88 | 50 | 10 | 5.7 |
| MM1Z4694 | CC | 7.79 | 8.2 | 8.61 | 50 | 1.0 | 6.2 |
| MM1Z4696 | CE | 8.65 | 9.1 | 9.56 | 50 | 1.0 | 6.9 |
| MM1Z4697 | CF | 9.50 | 10 | 10.50 | 50 | 1.0 | 7.6 |
| MM1Z4698 | CH | 10.45 | 11 | 11.50 | 50 | 0.05 | 8.4 |
| MM1Z4699 | CJ | 11.40 | 12 | 12.60 | 50 | 0.05 | 9.1 |
| MM1Z4700 | CK | 12.35 | 13 | 13.65 | 50 | 0.05 | 9.8 |
| MM1Z4702 | CN | 14.25 | 15 | 15.75 | 50 | 0.05 | 11.4 |
| MM1Z4703 | CP | 15.20 | 16 | 16.80 | 50 | 0.05 | 12.1 |
| MM1Z4705 | CX | 17.10 | 18 | 18.90 | 50 | 0.05 | 13.6 |
| MM1Z4707 | CZ | 19.00 | 20 | 21.00 | 50 | 0.01 | 15.2 |
| MM1Z4708 | DA | 20.90 | 22 | 23.10 | 50 | 0.01 | 16.7 |
| MM1Z4709 | DB | 22.80 | 24 | 25.20 | 50 | 0.01 | 18.2 |
| MM1Z4711 | DD | 25.65 | 27 | 28.35 | 50 | 0.01 | 20.4 |
| MM1Z4713 | DF | 28.50 | 30 | 31.50 | 50 | 0.01 | 22.8 |
| MM1Z4714 | DH | 31.35 | 33 | 34.65 | 50 | 0.01 | 25.0 |
| MM1Z4715 | DJ | 34.20 | 36 | 37.80 | 50 | 0.01 | 27.3 |
| MM1Z4716 | DK | 37.05 | 39 | 40.95 | 50 | 0.01 | 29.6 |
| MM1Z4717 | DM | 40.85 | 43 | 45.15 | 50 | 0.01 | 32.6 |

Notes :

(1) Tested with pulses $t_p = 20\text{ ms}$

RATING AND CHARACTERISTIC CURVES (MM1Z4689 - MM1Z4717)

**FIG.1 - TEMPERATURE COEFFICIENTS
(TEMPERATURE RANGE - 55 °C to +150 °C)**



**FIG.2 - TEMPERATURE COEFFICIENTS
(TEMPERATURE RANGE - 55 °C to +150 °C)**

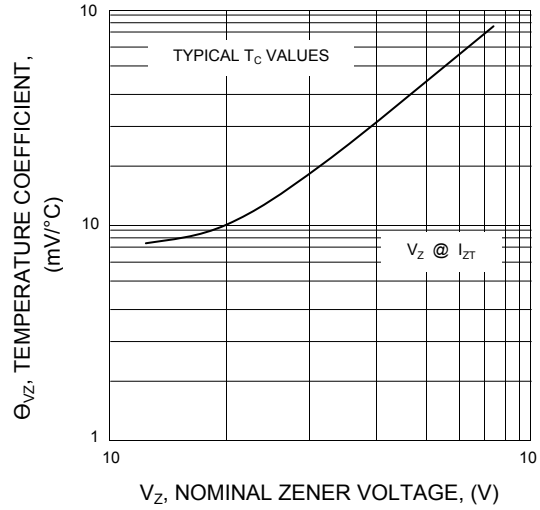


FIG.3 - TYPICAL FORWARD VOLTAGE

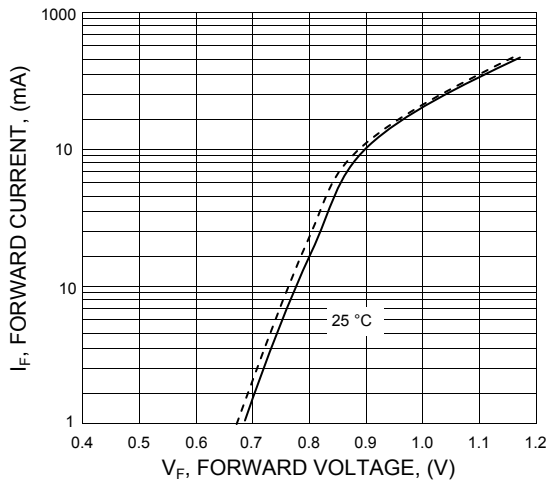


FIG.4 - MAXIMUM NON-REPETITIVE SURGE POWER

