



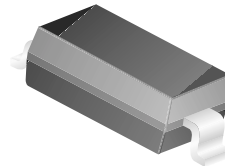
# Zeners

## MMSZ5226B - MMSZ5257B

### Absolute Maximum Ratings\*

T<sub>A</sub> = 25°C unless otherwise noted

| Symbol           | Parameter                                  | Value       | Units |
|------------------|--------------------------------------------|-------------|-------|
| P <sub>D</sub>   | Power Dissipation @ 25°C                   | 500         | mW    |
| R <sub>θJA</sub> | Thermal Resistance, Junction to Ambient ** | 340         | °C/W  |
| T <sub>stg</sub> | Storage Temperature Range                  | -55 to +150 | °C    |
| T <sub>J</sub>   | Operating Junction Temperature             | + 150       | °C    |



SOD-123

\*These ratings are limiting values above which serviceability of any semiconductor may be impaired.

\*\*FR-4 or FR-5 = 3.5 x 1.5 inches using minimum recommended land pads.

### Electrical Characteristics

T<sub>A</sub> = 25°C unless otherwise noted

| Device     | Mark | V <sub>Z</sub> (V) | Z <sub>Z</sub> (Ω) @ I <sub>Z</sub> (mA) | Z <sub>ZK</sub> (Ω) @ I <sub>ZK</sub> (mA) | I <sub>R</sub> (μA) @ V <sub>R</sub> (V) |
|------------|------|--------------------|------------------------------------------|--------------------------------------------|------------------------------------------|
| MMSZ 5226B | D1   | 3.3                | 28 20                                    | 1,600 0.25                                 | 25 1.0                                   |
| MMSZ 5227B | D2   | 3.6                | 24 20                                    | 1,700 0.25                                 | 15 1.0                                   |
| MMSZ 5228B | D3   | 3.9                | 23 20                                    | 1,900 0.25                                 | 10 1.0                                   |
| MMSZ 5229B | D4   | 4.3                | 22 20                                    | 1,000 0.25                                 | 5.0 1.0                                  |
| MMSZ 5230B | D5   | 4.7                | 19 20                                    | 1,900 0.25                                 | 5.0 2.0                                  |
| MMSZ 5231B | E1   | 5.1                | 17 20                                    | 1,600 0.25                                 | 5.0 2.0                                  |
| MMSZ 5232B | E2   | 5.6                | 11 20                                    | 1,600 0.25                                 | 5.0 3.0                                  |
| MMSZ 5233B | E3   | 6.0                | 7.0 20                                   | 1,600 0.25                                 | 5.0 3.5                                  |
| MMSZ 5234B | E4   | 6.2                | 7.0 20                                   | 1,000 0.25                                 | 5.0 4.0                                  |
| MMSZ 5235B | E5   | 6.8                | 5.0 20                                   | 750 0.25                                   | 3.0 5.0                                  |
| MMSZ 5236B | F1   | 7.5                | 6.0 20                                   | 500 0.25                                   | 3.0 6.0                                  |
| MMSZ 5237B | F2   | 8.2                | 8.0 20                                   | 500 0.25                                   | 3.0 6.5                                  |
| MMSZ 5238B | F3   | 8.7                | 8.0 20                                   | 600 0.25                                   | 3.0 6.5                                  |
| MMSZ 5239B | F4   | 9.1                | 10 20                                    | 600 0.25                                   | 3.0 7.0                                  |
| MMSZ 5240B | F5   | 10                 | 17 20                                    | 600 0.25                                   | 3.0 8.0                                  |
| MMSZ 5241B | H1   | 11                 | 22 20                                    | 600 0.25                                   | 2.0 8.4                                  |
| MMSZ 5242B | H2   | 12                 | 30 20                                    | 600 0.25                                   | 1.0 9.1                                  |
| MMSZ 5243B | H3   | 13                 | 13 9.5                                   | 600 0.25                                   | 0.5 9.9                                  |
| MMSZ 5244B | H4   | 14                 | 15 9.0                                   | 600 0.25                                   | 0.1 10                                   |
| MMSZ 5245B | H5   | 15                 | 16 8.5                                   | 600 0.25                                   | 0.1 11                                   |
| MMSZ 5246B | J1   | 16                 | 17 7.8                                   | 600 0.25                                   | 0.1 12                                   |
| MMSZ 5247B | J2   | 17                 | 19 7.4                                   | 600 0.25                                   | 0.1 13                                   |
| MMSZ 5248B | J3   | 18                 | 21 7.0                                   | 600 0.25                                   | 0.1 14                                   |
| MMSZ 5249B | J4   | 19                 | 23 6.6                                   | 600 0.25                                   | 0.1 14                                   |
| MMSZ 5250B | J5   | 20                 | 25 6.2                                   | 600 0.25                                   | 0.1 15                                   |
| MMSZ 5251B | K1   | 22                 | 29 5.6                                   | 600 0.25                                   | 0.1 17                                   |
| MMSZ 5252B | K2   | 24                 | 33 5.2                                   | 600 0.25                                   | 0.1 18                                   |
| MMSZ 5253B | K3   | 25                 | 35 5.0                                   | 600 0.25                                   | 0.1 19                                   |
| MMSZ 5254B | K4   | 27                 | 41 4.6                                   | 600 0.25                                   | 0.1 21                                   |
| MMSZ 5255B | K5   | 28                 | 44 4.5                                   | 600 0.25                                   | 0.1 21                                   |
| MMSZ 5256B | M1   | 30                 | 49 4.2                                   | 600 0.25                                   | 0.1 23                                   |
| MMSZ 5257B | M2   | 33                 | 58 3.8                                   | 700 0.25                                   | 0.1 25                                   |

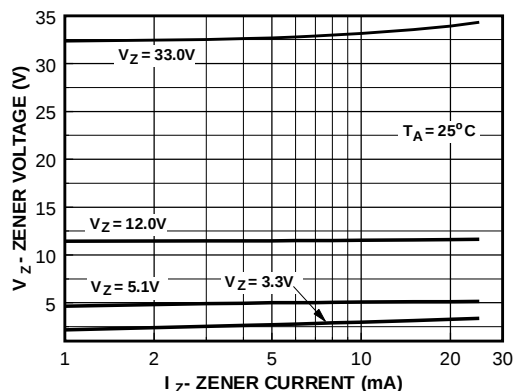
V<sub>F</sub> Forward Voltage= 0.9 V Maximum @ I<sub>F</sub> = 10 mA for all MMSZ 5200 series

Zeners (MMSZ5226B - MMSZ5257B)

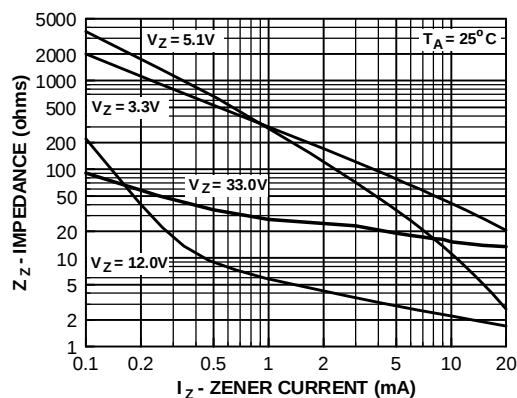
# Zeners (MMSZ5226B - MMSZ5257B)

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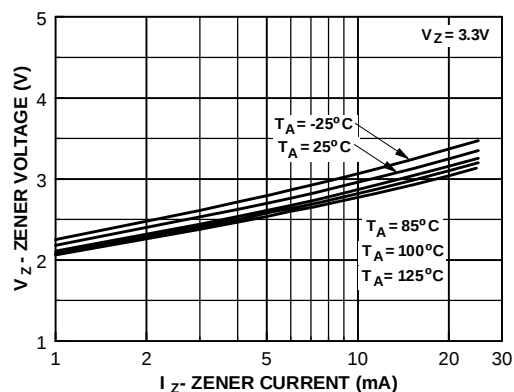
## Typical Characteristics



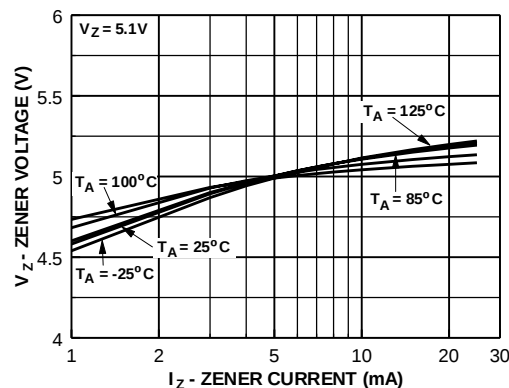
Zener Current vs. Zener Voltage



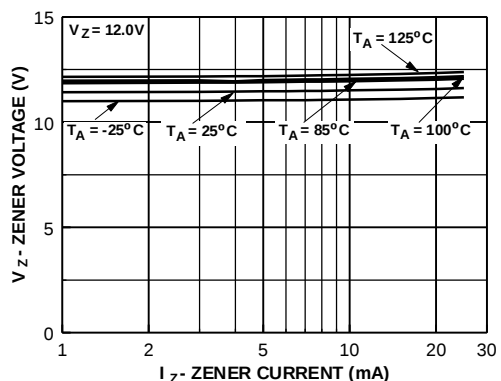
Zener Current vs. Zener Impedance



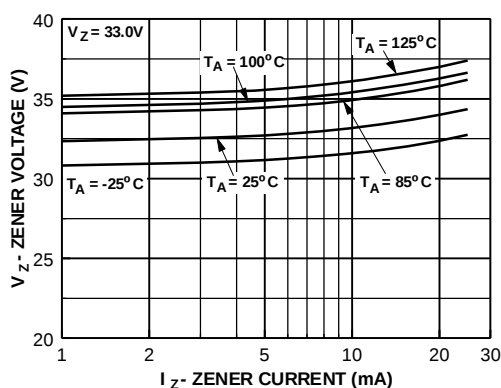
3.3 Zener Voltage vs. Temperature



5.1 Zener Voltage vs. Temperature



12 Zener Voltage vs. Zener Temperature



33 Zener Voltage vs. Zener Temperature

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