

Discrete POWER & Signal **Technologies** 

# MMBZ5226B - MMBZ5257B Series Zeners

Tolerance: B = 5%

### **Absolute Maximum Ratings\***

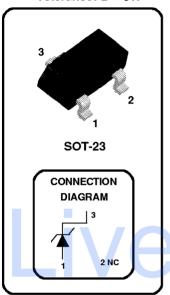
TA = 25°C unless otherwise noted

| Parameter                                     | Value       | Units       |  |
|---|-------------|-------------|--|
| Storage Temperature Range                     | -55 to +150 | °C          |  |
| Maximum Junction Operating Temperature        | + 150       | °C          |  |
| Total Device Dissipation<br>Derate above 25°C | 350<br>1.8  | mW<br>mW/°C |  |

<sup>\*</sup>These ratings are limiting values above which the serviceability of the diode may be impaired.

1) These ratings are based on a maximum junction temperature of 150 degrees C.

2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.



### **Electrical Characteristics**

TA = 25°C unless otherwise noted

| Device     | Mark | <b>V</b> <sub>z</sub><br>(V) | Z <sub>Z</sub> (Ω) | J <sub>ZT</sub> (mA) | Z <sub>ZK</sub> (Ω) | D I <sub>ZK</sub> (mA) | <b>V</b> <sub>R</sub><br>(V) | @ I <sub>R</sub> (μ <b>A</b> ) |
|------------|------|------------------------------|--------------------|----------------------|---------------------|------------------------|------------------------------|--------------------------------|
| MMBZ 5226B | 8A   | 3.3                          | 28                 | 20                   | 1,600               | 0.25                   | 1.0                          | 25                             |
| MMBZ 5227B | 8B   | 3.6                          | 24                 | 20                   | 1,700               | 0.25                   | 1.0                          | 15                             |
| MMBZ 5228B | 8C   | 3.9                          | 23                 | 20                   | 1,900               | 0.25                   | 1.0                          | 10                             |
| MMBZ 5229B | 8D   | 4.3                          | 22                 | 20                   | 1,000               | 0.25                   | 1.0                          | 5.0                            |
| MMBZ 5230B | 8E   | 4.7                          | 19                 | 20                   | 1,900               | 0.25                   | 2.0                          | 5.0                            |
| MMBZ 5231B | 8F   | 5.1                          | 17                 | 20                   | 1,600               | 0.25                   | 2.0                          | 5.0                            |
| MMBZ 5232B | 8G   | 5.6                          | 11                 | 20                   | 1,600               | 0.25                   | 3.0                          | 5.0                            |
| MMBZ 5233B | 8H   | 6.0                          | 7.0                | 20                   | 1,600               | 0.25                   | 3.5                          | 5.0                            |
| MMBZ 5234B | 8J   | 6.2                          | 7.0                | 20                   | 1,000               | 0.25                   | 4.0                          | 5.0                            |
| MMBZ 5235B | 8K   | 6.8                          | 5.0                | 20                   | 750                 | 0.25                   | 5.0                          | 3.0                            |
| MMBZ 5236B | 8L   | 7.5                          | 6.0                | 20                   | 500                 | 0.25                   | 6.0                          | 3.0                            |
| MMBZ 5237B | 8M   | 8.2                          | 8.0                | 20                   | 500                 | 0.25                   | 6.5                          | 3.0                            |
| MMBZ 5238B | 8N   | 8.7                          | 8.0                | 20                   | 600                 | 0.25                   | 6.5                          | 3.0                            |
| MMBZ 5239B | 8P   | 9.1                          | 10                 | 20                   | 600                 | 0.25                   | 7.0                          | 3.0                            |
| MMBZ 5240B | 8Q   | 10                           | 17                 | 20                   | 600                 | 0.25                   | 8.0                          | 3.0                            |
| MMBZ 5241B | 8R   | 11                           | 22                 | 20                   | 600                 | 0.25                   | 8.4                          | 2.0                            |
| MMBZ 5242B | 8S   | 12                           | 30                 | 20                   | 600                 | 0.25                   | 9.1                          | 1.0                            |

 $V_F$  Foward Voltage = 0.9 V Maximum @  $I_F$  = 10 mA for all MMBZ 5200 series

NOTE: National preferred devices in BOLD

# **MMBZ Series Zeners**

(continued)

# Electrical Characteristics (continued)

TA = 25°C unless otherwise noted

| Device     | Mark | <b>V</b> <sub>z</sub> (V) | <b>Z</b> <sub>Z</sub><br>(Ω) | l <sub>ZT</sub><br>(mA) | <b>Z</b> <sub>ZK</sub> (Ω) | I <sub>ZK</sub><br>(mA) | V <sub>R</sub> (V) | I <sub>R</sub><br>(nA) |
|------------|------|---------------------------|------------------------------|-------------------------|----------------------------|-------------------------|--------------------|------------------------|
| MMBZ 5243B | 8T   | 13                        | 13                           | 9.5                     | 600                        | 0.25                    | 9.9                | 500                    |
| MMBZ 5244B | 8U   | 14                        | 15                           | 9.0                     | 600                        | 0.25                    | 10                 | 100                    |
| MMBZ 5245B | 8V   | 15                        | 16                           | 8.5                     | 600                        | 0.25                    | 11                 | 100                    |
| MMBZ 5246B | 8W   | 16                        | 17                           | 7.8                     | 600                        | 0.25                    | 12                 | 100                    |
| MMBZ 5247B | 8X   | 17                        | 19                           | 7.4                     | 600                        | 0.25                    | 13                 | 100                    |
| MMBZ 5248B | 8Y   | 18                        | 21                           | 7.0                     | 600                        | 0.25                    | 14                 | 100                    |
| MMBZ 5249B | 8Z   | 19                        | 23                           | 6.6                     | 600                        | 0.25                    | 14                 | 100                    |
| MMBZ 5250B | 81A  | 20                        | 25                           | 6.2                     | 600                        | 0.25                    | 15                 | 100                    |
| MMBZ 5251B | 81B  | 22                        | 29                           | 5.6                     | 600                        | 0.25                    | 17                 | 100                    |
| MMBZ 5252B | 81C  | 24                        | 33                           | 5.2                     | 600                        | 0.25                    | 18                 | 100                    |
| MMBZ 5253B | 81D  | 25                        | 35                           | 5.0                     | 600                        | 0.25                    | 19                 | 100                    |
| MMBZ 5254B | 81E  | 27                        | 41                           | 4.6                     | 600                        | 0.25                    | 21                 | 100                    |
| MMBZ 5255B | 81F  | 28                        | 44                           | 4.5                     | 600                        | 0.25                    | 21                 | 100                    |
| MMBZ 5256B | 81G  | 30                        | 49                           | 4.2                     | 600                        | 0.25                    | 23                 | 100                    |
| MMBZ 5257B | 81H  | 33                        | 58                           | 3.8                     | 700                        | 0.25                    | 25                 | 100                    |

 $V_{\text{F}}$  Foward Voltage = 0.9 V Maximum @ I<sub>F</sub> = 10 mA for all MMBZ 5200 series

NOTE: National preferred devices in BOLD

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