

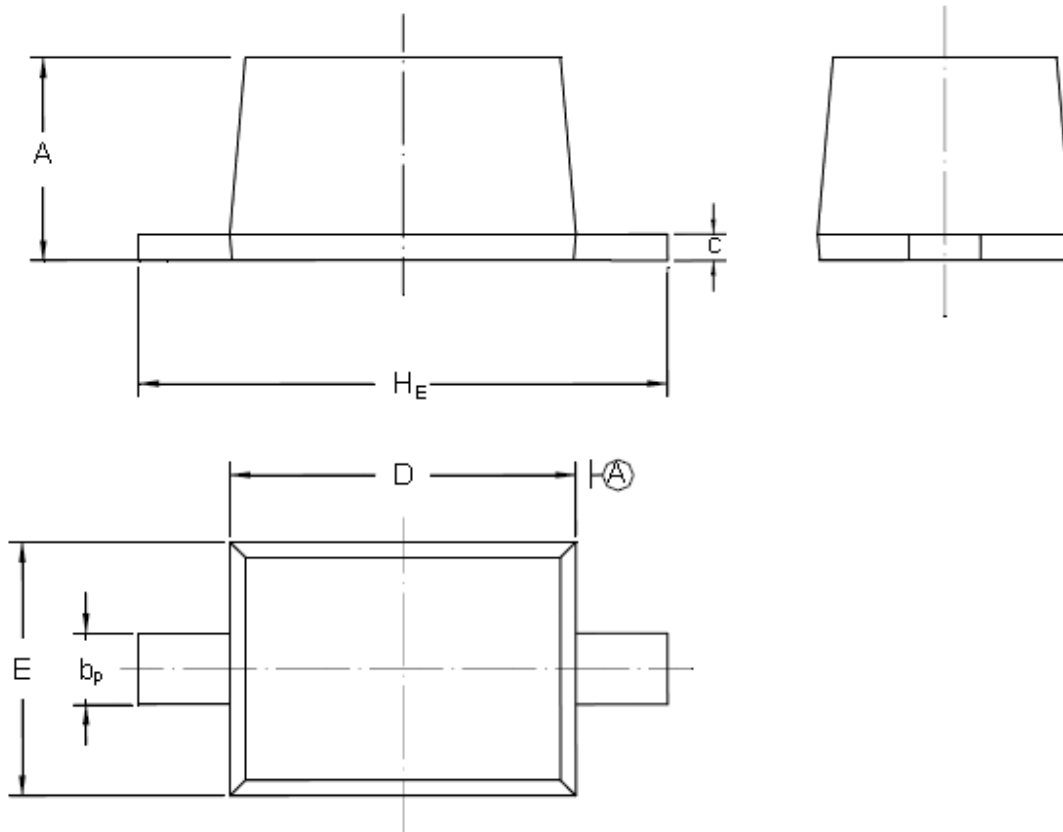
## MM3Z2B4-MM3ZB75 ZENER DIODES

**Features:**

- Power Dissipation: 300 mW
- Zener Voltage Tolerance:  $\pm 2\%$

**Mechanical Data:**

- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity :Cathode Band
- Marking: Marking Code

**Mechanical Dimensions: In mm**


| UNIT | A    | b <sub>p</sub> | C    | D    | E    | H <sub>E</sub> |
|------|------|----------------|------|------|------|----------------|
| mm   | 1.10 | 0.40           | 0.15 | 1.80 | 1.35 | 2.80           |
|      | 0.80 | 0.25           | 0.10 | 1.60 | 1.15 | 2.30           |

**SOD-323(XH)**

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - [sales@smc-diodes.com](mailto:sales@smc-diodes.com) •



## MM3Z SERIES

Technical Data  
Data Sheet N1354, Rev. A

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### Ordering Information:

| Device          | Package              | Shipping       |
|-----------------|----------------------|----------------|
| MM3Z2B4-MM3ZB75 | SOD-323<br>(Pb-Free) | 3000pcs / reel |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

### Maximum Ratings ( $T_a=25^{\circ}\text{C}$ , Unless otherwise specified)

| Characteristic                             | Symbol           | MM3Z2B4-MM3ZB75 | Unit                 |
|--|------------------|-----------------|----------------------|
| Total Power Dissipation                    | $P_{\text{tot}}$ | 300             | mW                   |
| Forward voltage at $I_F=10\text{mA}$       | $V_F$            | 0.9             | V                    |
| Thermal Resistance Junction to Ambient Air | $R_{\theta JA}$  | 417             | $^{\circ}\text{C/W}$ |
| Junction Temperature                       | $T_J$            | -55 to +150     | $^{\circ}\text{C}$   |
| Storage Temperature Range                  | $T_{\text{STG}}$ | -65 to +150     | $^{\circ}\text{C}$   |

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**Electrical Characteristics** ( $T_{amb}=25^{\circ}C$ , Unless otherwise specified)

| Type    | Marking Code | Zener Voltage Range <sup>1)</sup> |                       |                          | Dynamic Impedance           |                          | Reverse Leakage Current     |                        |
|---------|--------------|-----------------------------------|-----------------------|--------------------------|-----------------------------|--------------------------|-----------------------------|------------------------|
|         |              | V <sub>znom</sub><br>V            | I <sub>ZT</sub><br>mA | for V <sub>ZT</sub><br>V | Z <sub>ZT</sub> (Max.)<br>Ω | at I <sub>ZT</sub><br>mA | I <sub>R</sub> (Max.)<br>μA | at V <sub>R</sub><br>V |
| MM3Z2B4 | DN           | 2.4                               | 5                     | 2.352... 2.448           | 100                         | 5                        | 120                         | 1                      |
| MM3Z2B7 | DP           | 2.7                               | 5                     | 2.646... 2.754           | 110                         | 5                        | 120                         | 1                      |
| MM3Z3B0 | DR           | 3.0                               | 5                     | 2.94... 3.06             | 120                         | 5                        | 50                          | 1                      |
| MM3Z3B3 | DX           | 3.3                               | 5                     | 3.234... 3.366           | 130                         | 5                        | 20                          | 1                      |
| MM3Z3B6 | DY           | 3.6                               | 5                     | 3.528... 3.672           | 130                         | 5                        | 10                          | 1                      |
| MM3Z3B9 | DZ           | 3.9                               | 5                     | 3.822... 3.978           | 130                         | 5                        | 5                           | 1                      |
| MM3Z4B3 | Z0           | 4.3                               | 5                     | 4.214... 4.386           | 130                         | 5                        | 5                           | 1                      |
| MM3Z4B7 | EB           | 4.7                               | 5                     | 4.606... 4.794           | 130                         | 5                        | 2                           | 1                      |
| MM3Z5B1 | EC           | 5.1                               | 5                     | 4.998... 5.202           | 130                         | 5                        | 2                           | 1.5                    |
| MM3Z5B6 | ED           | 5.6                               | 5                     | 5.488... 5.712           | 80                          | 5                        | 1                           | 2.5                    |
| MM3Z6B2 | EE           | 6.2                               | 5                     | 6.076... 6.324           | 50                          | 5                        | 1                           | 3                      |
| MM3Z6B8 | EF           | 6.8                               | 5                     | 6.664... 6.936           | 30                          | 5                        | 0.5                         | 3.5                    |
| MM3Z7B5 | EH           | 7.5                               | 5                     | 7.35... 7.65             | 30                          | 5                        | 0.5                         | 4                      |
| MM3Z8B2 | EJ           | 8.2                               | 5                     | 8.036... 8.364           | 30                          | 5                        | 0.5                         | 5                      |
| MM3Z9B1 | EK           | 9.1                               | 5                     | 8.918... 9.282           | 30                          | 5                        | 0.5                         | 6                      |
| MM3ZB10 | EM           | 10                                | 5                     | 9.8... 10.2              | 30                          | 5                        | 0.1                         | 7                      |
| MM3ZB11 | EN           | 11                                | 5                     | 10.78... 11.22           | 30                          | 5                        | 0.1                         | 8                      |
| MM3ZB12 | EP           | 12                                | 5                     | 11.76... 12.24           | 35                          | 5                        | 0.1                         | 9                      |
| MM3ZB13 | ER           | 13                                | 5                     | 12.74... 13.26           | 35                          | 5                        | 0.1                         | 10                     |
| MM3ZB15 | EX           | 15                                | 5                     | 14.7... 15.3             | 40                          | 5                        | 0.1                         | 11                     |
| MM3ZB16 | EY           | 16                                | 5                     | 15.68... 16.32           | 40                          | 5                        | 0.1                         | 12                     |
| MM3ZB18 | EZ           | 18                                | 5                     | 17.64... 18.36           | 45                          | 5                        | 0.1                         | 13                     |
| MM3ZB20 | FA           | 20                                | 5                     | 19.6... 20.4             | 50                          | 5                        | 0.1                         | 15                     |
| MM3ZB22 | FB           | 22                                | 5                     | 21.56... 22.44           | 55                          | 5                        | 0.1                         | 17                     |
| MM3ZB24 | FC           | 24                                | 5                     | 23.52... 24.48           | 60                          | 5                        | 0.1                         | 19                     |
| MM3ZB27 | FD           | 27                                | 5                     | 26.46... 27.54           | 70                          | 2                        | 0.1                         | 21                     |
| MM3ZB30 | FE           | 30                                | 5                     | 29.4... 30.6             | 80                          | 2                        | 0.1                         | 23                     |
| MM3ZB33 | FF           | 33                                | 5                     | 32.34... 33.66           | 80                          | 2                        | 0.1                         | 25                     |
| MM3ZB36 | FH           | 36                                | 5                     | 35.28... 36.72           | 90                          | 2                        | 0.1                         | 27                     |
| MM3ZB39 | FJ           | 39                                | 2.5                   | 38.22... 39.78           | 100                         | 2                        | 2                           | 30                     |
| MM3ZB43 | XJ           | 43                                | 2.5                   | 42.14... 43.86           | 130                         | 2                        | 2                           | 33                     |
| MM3ZB47 | XK           | 47                                | 2.5                   | 46.06... 47.94           | 150                         | 2                        | 2                           | 36                     |
| MM3ZB51 | XM           | 51                                | 2.5                   | 49.98... 52.02           | 180                         | 2                        | 1                           | 39                     |
| MM3ZB56 | XN           | 56                                | 2.5                   | 54.88... 57.12           | 180                         | 2                        | 1                           | 43                     |
| MM3ZB62 | XP           | 62                                | 2.5                   | 60.76... 63.24           | 200                         | 2                        | 0.2                         | 47                     |
| MM3ZB68 | XR           | 68                                | 2.5                   | 66.64... 69.36           | 250                         | 2                        | 0.2                         | 52                     |
| MM3ZB75 | XX           | 75                                | 2.5                   | 73.5... 76.5             | 300                         | 2                        | 0.2                         | 57                     |

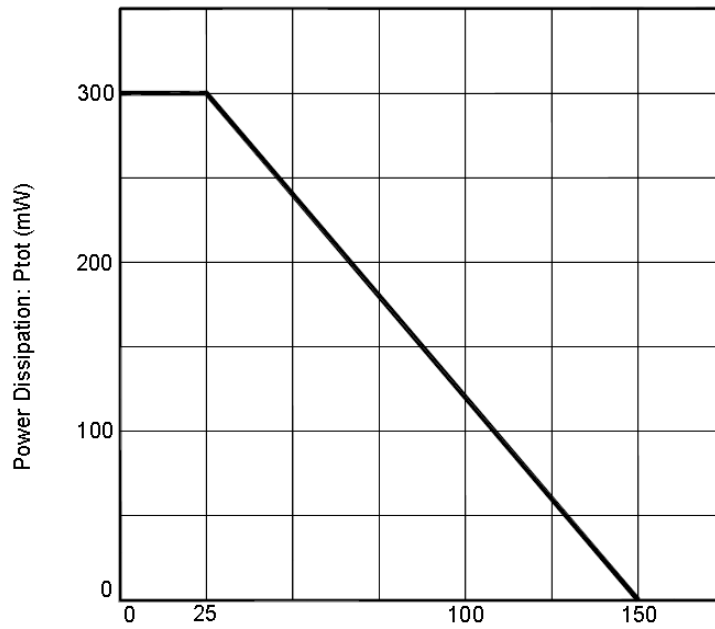
**Note:** Vz is tested with pulses (20 ms).



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Ambient Temperature: T<sub>a</sub> (°C)

Derating Curve

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