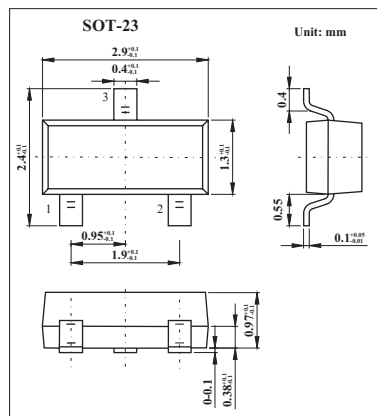
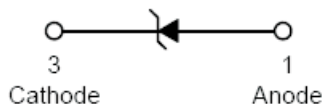


## 350mW Surface Mount Zener Diode MMBZ5252B

### ■ Features

- Planar Die Construction
- General Purpose, Medium Current
- Ideally Suited for Automated Assembly Processes



### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter                                      | Symbol          | Rating      | Unit               |
|------------------------------------------------|-----------------|-------------|--------------------|
| Forward Voltage @ $I_F = 10\text{mA}$          | $V_F$           | 0.9         | V                  |
| Power Dissipation *1                           | $P_d$           | 350         | mW                 |
| Thermal Resistance, Junction to Ambient Air *1 | $R_{\theta JA}$ | 357         | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range        | $T_j, T_{STG}$  | -65 to +150 | $^\circ\text{C}$   |

\*1. Part mounted on FR-4 PC board with recommended pad layout

### ■ Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

| Type Number | Zener Voltage Range *1 |         |         |          | Maximum Zener Impedance *2 |                                   | Maximum Reverse Leakage Current *1 |         |
|-------------|------------------------|---------|---------|----------|----------------------------|-----------------------------------|------------------------------------|---------|
|             | $V_Z @ I_{ZT}$         |         |         | $I_{ZT}$ | $Z_{ZT} @ I_{ZT}$          | $Z_{ZK} @ I_{ZK} = 0.25\text{mA}$ | $I_R$                              | @ $V_R$ |
|             | Nom (V)                | Min (V) | Max (V) | mA       | $\Omega$                   |                                   | $\mu\text{A}$                      | V       |
| MMBZ5252B   | 24                     | 22.8    | 25.2    | 5.2      | 33                         | 600                               | 0.1                                | 18      |

\*1. Short duration test pulse used to minimize self-heating effect.

\*2.  $f = 1\text{KHz}$ .

### ■ Marking

|         |     |
|---------|-----|
| Marking | KK2 |
|---------|-----|

## MMBZ5252B

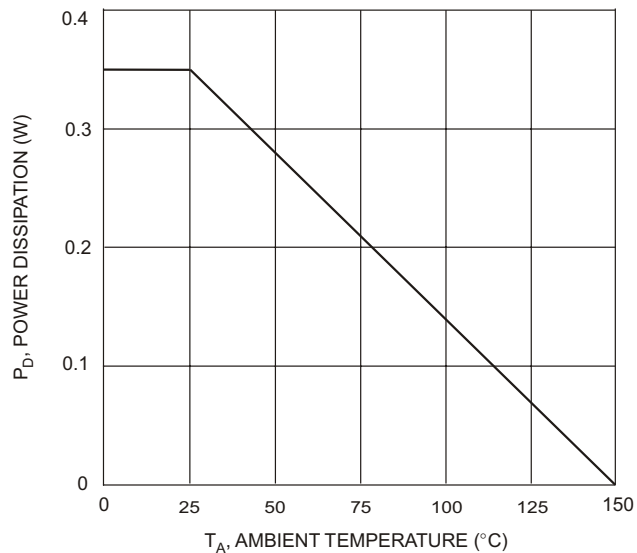


Fig. 1 Power Dissipation vs Ambient Temperature

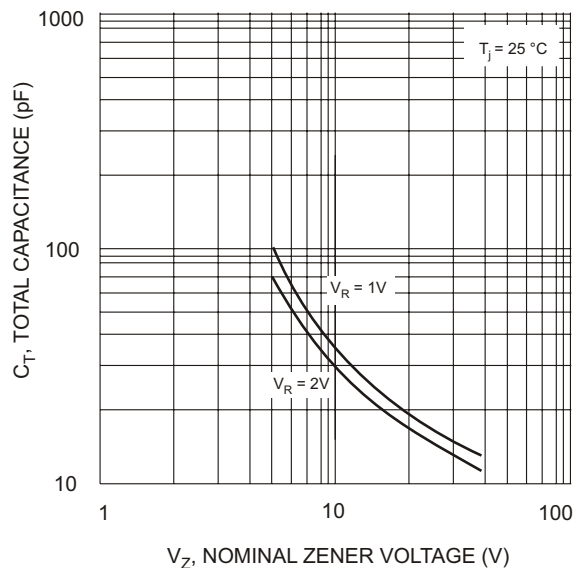


Fig. 2 Total Capacitance vs Nominal Zener Voltage

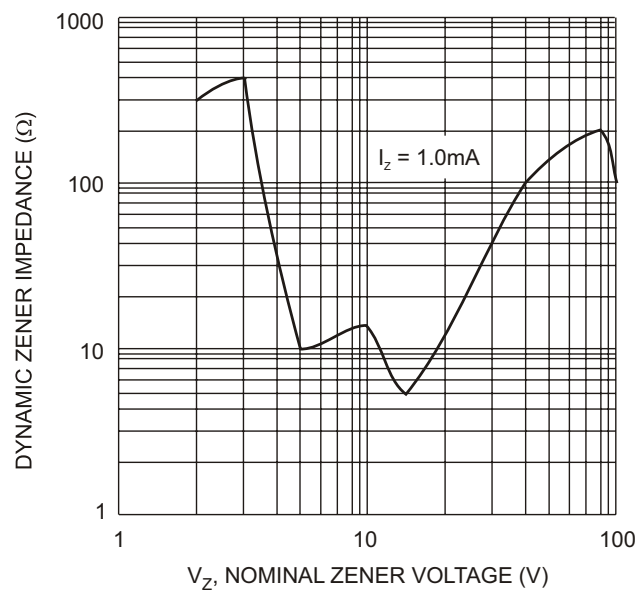


Fig. 3 Zener Voltage vs. Zener Impedance

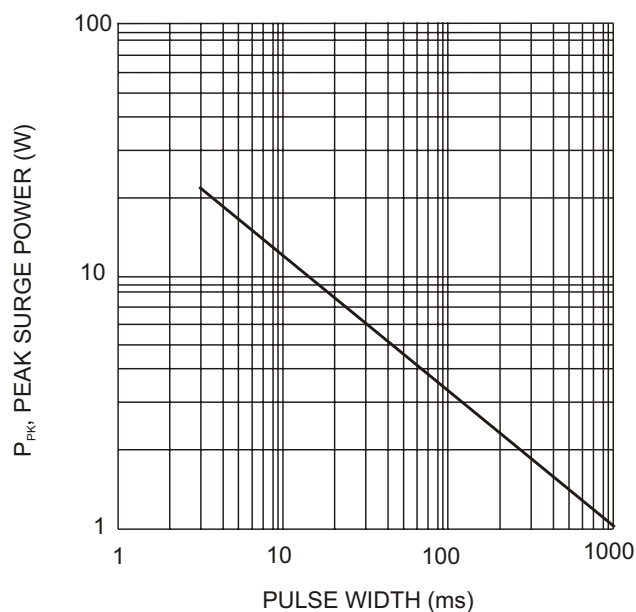


Fig. 4 Maximum Non-repetitive Surge Power

## MMBZ5252B

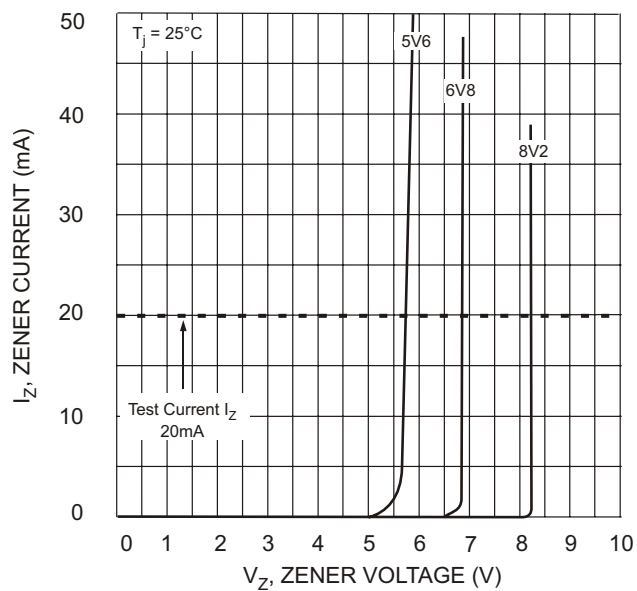


Fig. 5 Zener Breakdown Characteristics

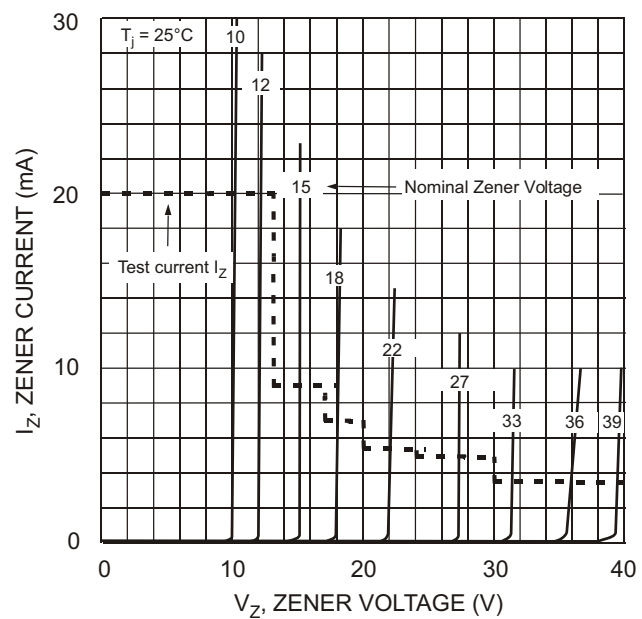


Fig. 6 Zener Breakdown Characteristics