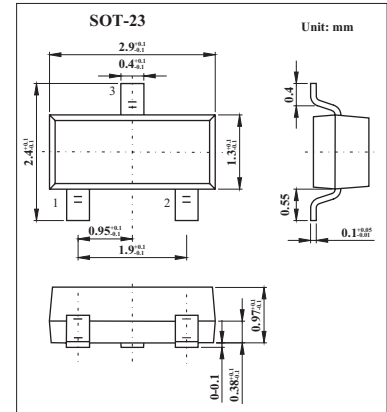


350mW Surface Mount Zener Diodes

BZX84C4V3

■ Features

- Planar Die Construction
- 350mW Power Dissipation
- Ideally Suited for Automated Assembly Processes



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

| Parameter | Symbol | Rating | Unit |
|--|-----------|--------------|--------------------|
| Forward Voltage at $I_F = 10\text{ mA}$ | V_F | 0.9 | V |
| Power Dissipation * | P_D | 350 | mW |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_s | -65 to + 150 | $^\circ\text{C}$ |
| Thermal Resistance Junction to Ambient Air * | R_{thA} | 417 | $^\circ\text{C/W}$ |

*Device mounted on FR-4 PC board with recommended pad layout,

■ Electrical Characteristics $T_a = 25^\circ\text{C}$ (unless otherwise noted)

| Type Number | Zener Voltage Range *1 | | | Maximum Zener Impedance *2 | | | Maximum Reverse Current *1 | | Typical Temperature Coefficient @ I_{ZT} mV/ $^\circ\text{C}$ | | |
|-------------|------------------------|---------|---------|----------------------------|-------------------|----------|----------------------------|-------|---|------|---|
| | $V_Z @ I_{ZT}$ | | | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | | I_R | V_R | Min | Max | |
| | Nom (V) | Min (V) | Max (V) | mA | Ω | Ω | mA | V | | | |
| BZX84C4V3 | 4.3 | 4.0 | 4.6 | 5.0 | 90 | 600 | 1.0 | 3 | 1 | -3.5 | 0 |

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

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

■ Marking

| | |
|---------|-----|
| Marking | Z17 |
|---------|-----|

BZX84C4V3

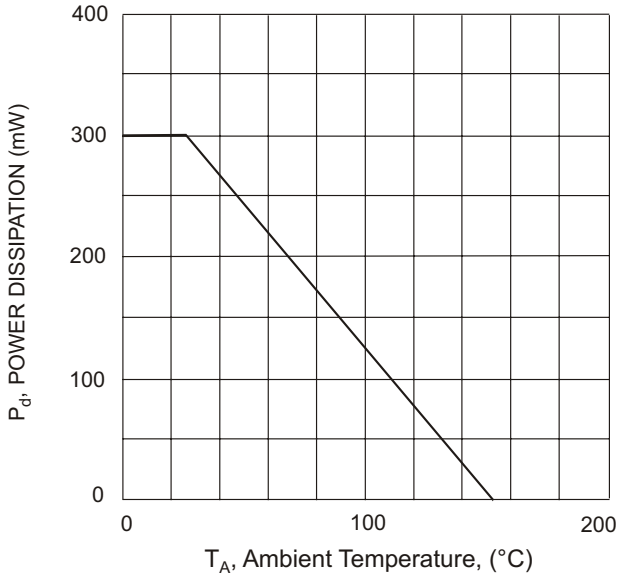


Fig. 1 Power Derating Curve

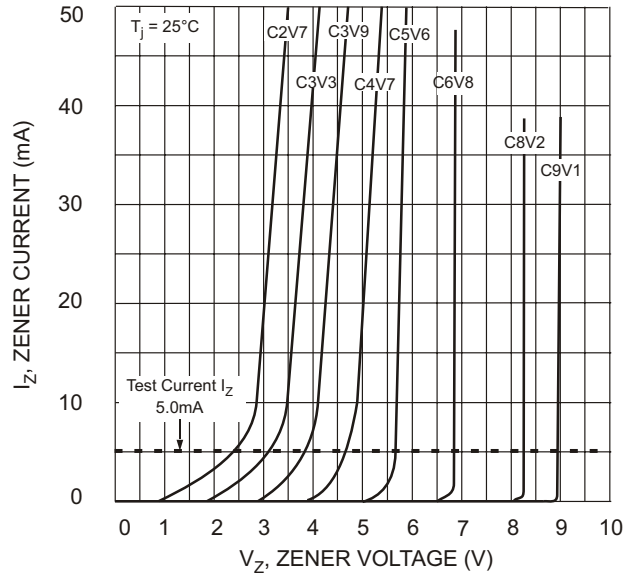


Fig. 2 Zener Breakdown Characteristics

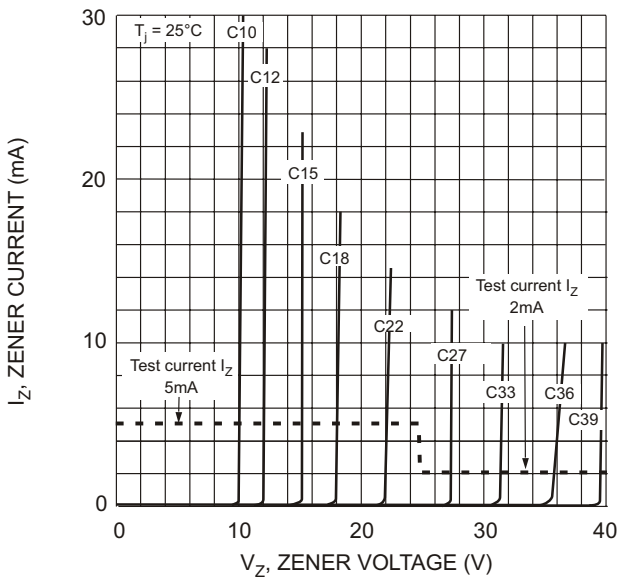


Fig. 3 Zener Breakdown Characteristics

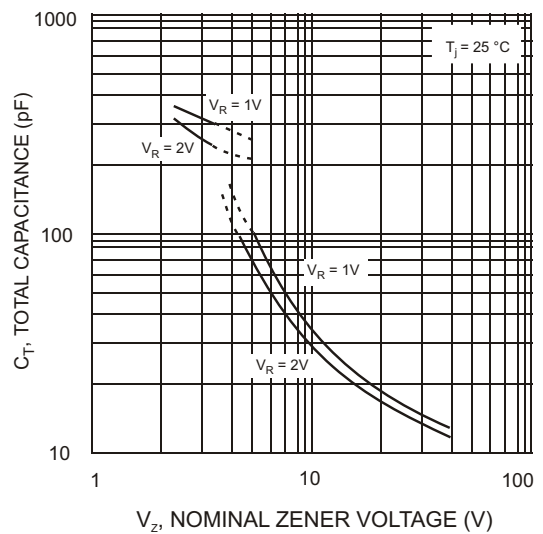


Fig. 4 Total Capacitance vs Nominal Zener Voltage