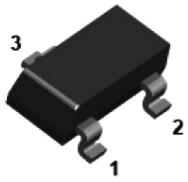
# 350mW
## Surface Mount Zener Diode

multicomp PRO

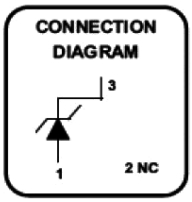
### Features:

- Planar Die Construction
- 350mW Power Dissipation
- Zener Voltages from 2.4V to 51V
- Ideally Suited For Automated Assembly Processes

Tolerance: C = 5%




SOT-23




### Applications:

350mW Surface mount zener diode

### Max. Rating @ $T_A$ = 25°C unless otherwise specified

| Parameter | Symbol | Limits | Unit |
|---|---|---|---|
| Forward Voltage @ $I_F$ = 10mA | $V_F$ | 0.9 | V |
| Power dissipation | $P_D$ | 350 | mW |
| Thermal resistance junction to ambient air | $R_{\theta JA}$ | 357 | °C/W |
| Operating and storage temperature range | $T_j$, $T_{STG}$ | -65 to +150 | °C |

**Note** : Valid provided that device terminals are kept at ambient temperature.
Tested with pulses, 300µs pulse width, period = 5ms.
f = 1kHz.

### Electrical Characteristics @ $T_A$ = 25°C unless otherwise specified

| Marking Code | Zener Voltage Range | | | | Max. Zener Impedance | | | Max. Reverse Current | | Typical Temperature Coefficient@ $I_{ZTC}$ mV/°C | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | $V_Z$ @ $I_{ZT}$ | | | $I_{ZT}$ | $Z_{ZT}$@$I_{ZT}$ | $Z_{ZK}$@$I_{ZK}$ | | $I_R$ | $V_R$ | | |
| | Nom(V) | Min(V) | Max(V) | mA | Ω | | mA | µA | V | Min. | Max. |
| Y17 | 51 | 48 | 54 | 2 | 180 | 400 | 0.5 | 0.1 | 35.7 | 10 | 12 |

### Typical Characteristics @ $T_A$ = 25°C unless otherwise specified

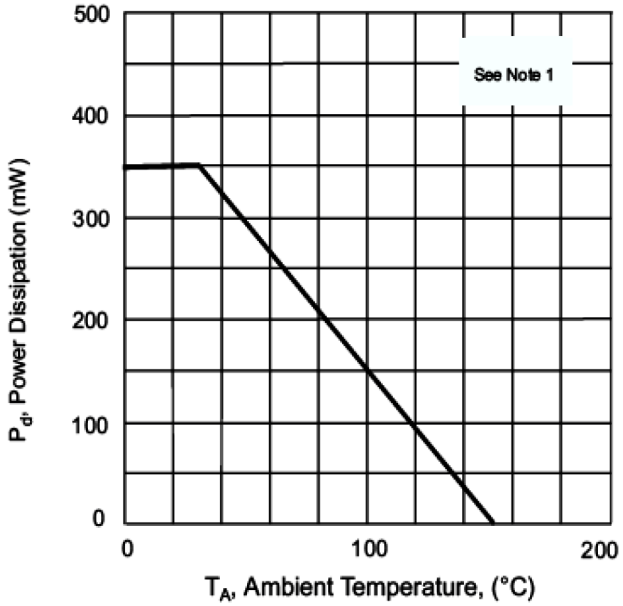


Fig. 1 Power Derating Curve

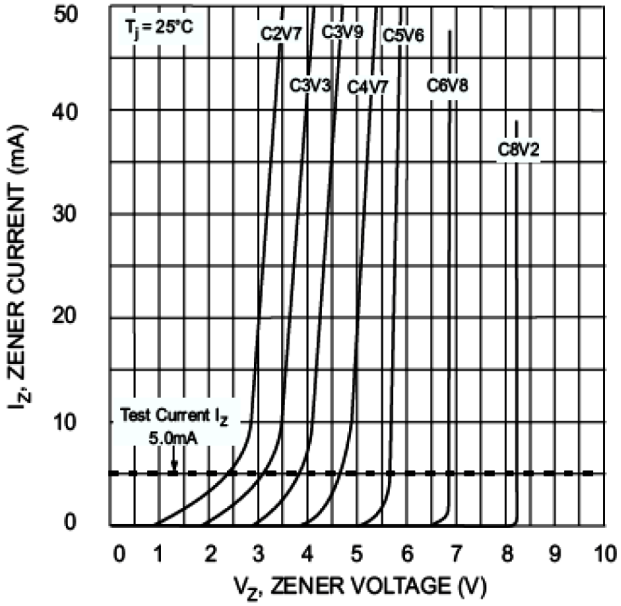


Fig. 2 Zener Breakdown Characteristics

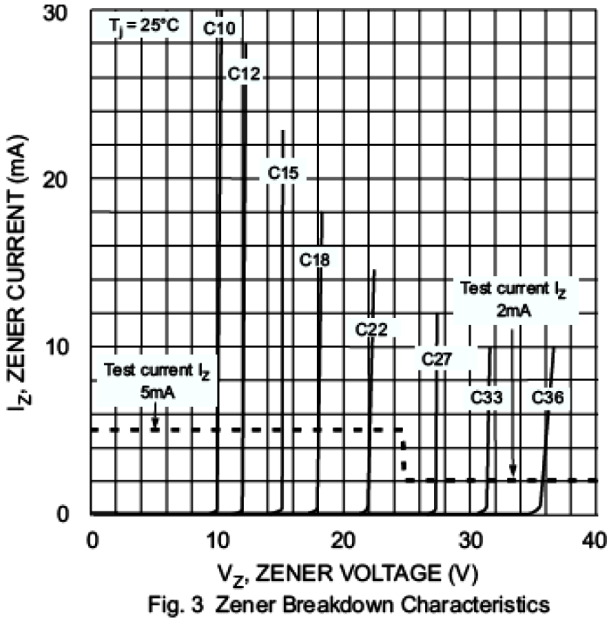


Fig. 3 Zener Breakdown Characteristics

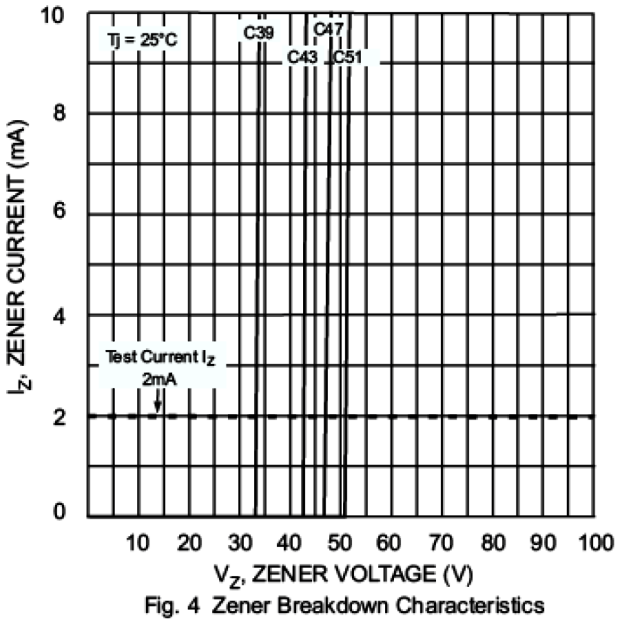
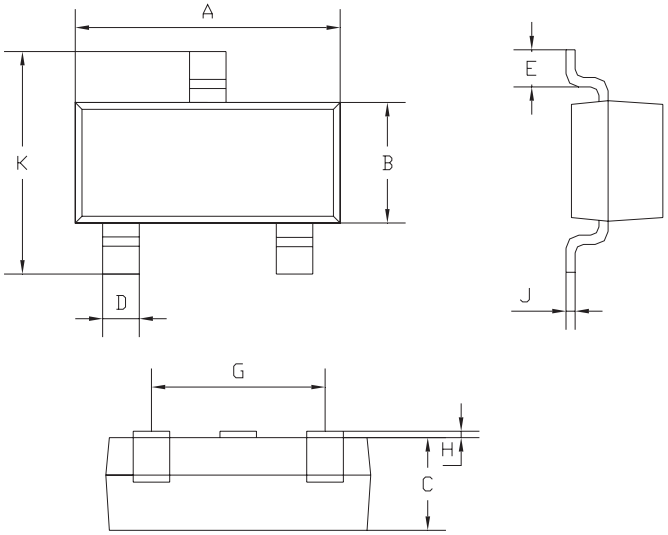


Fig. 4 Zener Breakdown Characteristics

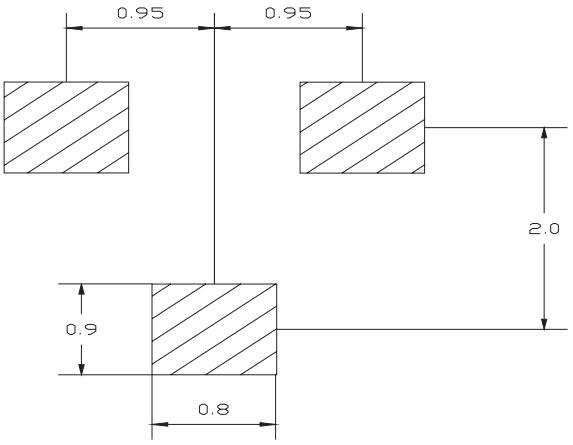
# 350mW
## Surface Mount Zener Diode

### Plastic surface mounted package




| SOT-23 | | |
|---|---|---|
| Dim | Min | Max |
| A | 2.85 | 2.95 |
| B | 1.25 | 1.35 |
| C | 1 Typical | |
| D | 0.37 | 0.43 |
| E | 0.35 | 0.48 |
| G | 1.85 | 1.95 |
| H | 0.02 | 0.1 |
| J | 0.1Typical | |
| K | 2.35 | 2.45 |
| All Dimensions in mm | | |

### Soldering Footprint




Unit : mm

### Package Information

| Device | Package | Shipping |
|---|---|---|
| BZX84C51-7-F | SOT-23 | 3,000 / Tape & Reel |

### Part Number Table

| Description | Part Number |
|---|---|
| 350mW Surface Mount Zener Diode | BZX84C51-7-F |