



SMAZ5V6 - SMAZ200

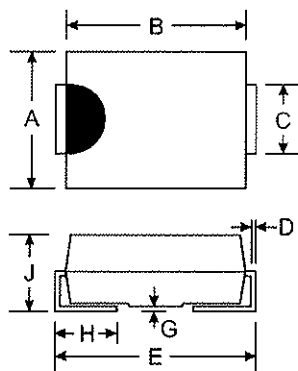
1.0W SURFACE MOUNT ZENER DIODE

Features

- 2.0W Power Dissipation on Infinite Heat Sink
- High Surge Capability
- Ideally Suited for Automatic Assembly
- 5.6V - 200V Nominal Zener Voltage Range
- Standard V_Z Tolerance is $\pm 5\%$
- Plastic Material: UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: SMA, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Marking: Marking Code (See Table on Page 2)
- Polarity: Cathode Notch or Cathode Band
- Weight: 0.064 grams (approx.)
- Mounting Position: Any



| SMA | | |
|-----|------|------|
| Dim | Min | Max |
| A | 2.29 | 2.92 |
| B | 4.00 | 4.60 |
| C | 1.27 | 1.63 |
| D | 0.15 | 0.31 |
| E | 4.80 | 5.59 |
| G | 0.10 | 0.20 |
| H | 0.76 | 1.52 |
| J | 2.01 | 2.62 |

All Dimensions in mm

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Characteristic | Symbol | Value | Unit |
|---|-----------------|-------------|---------------------------|
| Zener Current (see Table page 2) | I_Z | P_d / V_Z | mA |
| Power Dissipation Derate Above 50°C (Note 1) | P_d | 1.0 8.0 | W mW/ $^\circ\text{C}$ |
| Typical Thermal Resistance - Junction to Lead (Note 1) | $R_{\theta JL}$ | 30 | K/W |
| Typical Thermal Resistance - Junction to Ambient (Note 1) | $R_{\theta JA}$ | 120 | K/W |
| Operating and Storage Temperature Range | T_j, T_{STG} | -65 to +175 | $^\circ\text{C}$ |

- Notes:
1. Valid provided that device terminals are kept at ambient temperature.
 2. Tested with I_{ZT} current pulses. Pulse width $\leq 50\text{ms}$.

Electrical Characteristics @T_A = 25°C unless otherwise noted

| Type Number | Marking Code | Zener Voltage Range (Note 2) | | | Test Current | Maximum Zener Impedance | | | Maximum Reverse Current | | I _{ZSM} Max (Note 1) | | Typical Temperature Coefficient ΔV _Z |
|-------------|--------------|----------------------------------|---------|---------|--------------|-------------------------|-----------------------------------|-----------------------------------|-------------------------|---------------------------------|-------------------------------|------|--|
| | | V _Z @ I _{ZT} | | | | I _{ZT} | Z _{ZT} @ I _{ZT} | Z _{ZK} @ I _{ZK} | | I _R @ V _R | | 25°C | |
| | | Nom (V) | Min (V) | Max (V) | mA | | Ω | Ω | mA | μA | V | A | mA |
| SMAZ5V6 | ZHL | 5.60 | 5.32 | 5.88 | 100 | 2.0 | 250 | 2.0 | 5.0 | 1.0 | 7.1 | 330 | 0.025 |
| SMAZ6V2 | ZHN | 6.20 | 5.89 | 6.51 | 100 | 2.0 | 200 | 2.0 | 5.0 | 1.0 | 6.4 | 300 | 0.032 |
| SMAZ6V8 | ZHO | 6.80 | 6.46 | 7.14 | 100 | 2.0 | 200 | 1.0 | 5.0 | 1.0 | 5.9 | 275 | 0.040 |
| SMAZ7V5 | ZHQ | 7.50 | 7.13 | 7.88 | 100 | 2.0 | 450 | 1.0 | 5.0 | 2.0 | 5.4 | 250 | 0.045 |
| SMAZ8V2 | ZHR | 8.20 | 7.79 | 8.61 | 100 | 2.0 | 200 | 1.0 | 5.0 | 3.5 | 4.9 | 220 | 0.048 |
| SMAZ9V1 | ZHT | 9.10 | 8.65 | 9.56 | 50 | 4.0 | 200 | 1.0 | 5.0 | 3.5 | 4.4 | 205 | 0.051 |
| SMAZ10 | ZHU | 10.00 | 9.50 | 10.50 | 50 | 4.0 | 200 | 1.0 | 1.0 | 8.3 | 3.6 | 170 | 0.060 |
| SMAZ12 | ZHW | 12.00 | 11.40 | 12.60 | 50 | 7.0 | 150 | 1.0 | 1.0 | 9.1 | 3.3 | 155 | 0.065 |
| SMAZ15 | ZHZ | 15.00 | 14.25 | 15.75 | 50 | 10 | 150 | 1.0 | 1.0 | 11.4 | 2.7 | 130 | 0.070 |
| SMAZ16 | ZJA | 16.00 | 15.20 | 16.80 | 25 | 15 | 150 | 1.0 | 0.5 | 12.2 | 2.5 | 115 | 0.070 |
| SMAZ18 | ZJF | 18.00 | 17.10 | 18.90 | 25 | 15 | 150 | 1.0 | 0.5 | 13.7 | 2.2 | 105 | 0.075 |
| SMAZ20 | ZJG | 20.00 | 19.00 | 21.00 | 25 | 15 | 180 | 1.0 | 0.5 | 15.2 | 2.0 | 94 | 0.075 |
| SMAZ22 | ZJK | 22.00 | 20.90 | 23.10 | 25 | 15 | 180 | 1.0 | 0.5 | 16.7 | 1.8 | 86 | 0.080 |
| SMAZ24 | ZJL | 24.00 | 22.80 | 25.20 | 25 | 15 | 180 | 1.0 | 0.5 | 18.2 | 1.6 | 78 | 0.080 |
| SMAZ27 | ZJN | 27.00 | 25.65 | 28.35 | 25 | 15 | 200 | 1.0 | 0.5 | 20.5 | 1.4 | 69 | 0.085 |
| SMAZ30 | ZJQ | 30.00 | 28.50 | 31.50 | 25 | 15 | 250 | 1.0 | 0.5 | 22.8 | 1.1 | 62 | 0.085 |
| SMAZ33 | ZJR | 33.00 | 31.35 | 34.65 | 25 | 15 | 300 | 1.0 | 0.5 | 25.1 | 1.0 | 56 | 0.085 |
| SMAZ36 | ZJS | 36.00 | 34.20 | 37.80 | 10 | 40 | 350 | 1.0 | 0.5 | 27.4 | 0.9 | 52 | 0.085 |
| SMAZ39 | ZJT | 39.00 | 37.05 | 40.95 | 10 | 40 | 450 | 1.0 | 0.5 | 29.6 | 1.0 | 48 | 0.090 |
| SMAZ47 | ZJV | 47.00 | 44.65 | 49.35 | 10 | 45 | 600 | 1.0 | 0.5 | 35.7 | 0.7 | 40 | 0.090 |
| SMAZ68 | ZKM | 68.00 | 64.60 | 71.40 | 10 | 80 | 1000 | 1.0 | 0.5 | 47.1 | 0.064 | 30 | 0.090 |
| SMAZ100 | ZKQ | 100.00 | 95.00 | 105.00 | 5.0 | 200 | 2000 | 1.0 | 0.5 | 75 | 0.40 | 18 | 0.090 |
| SMAZ150 | ZKR | 150.00 | 142.50 | 157.50 | 5.0 | 300 | 4000 | 0.5 | 0.5 | 114 | 0.15 | 12.8 | 0.095 |
| SMAZ200 | ZKW | 200.00 | 190.00 | 210.00 | 5.0 | 350 | 6000 | 0.5 | 0.5 | 152 | 0.12 | 9.4 | 0.095 |

- Notes:
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 2. Tested with I_{ZT} current pulses. Pulse width ≤ 50ms.

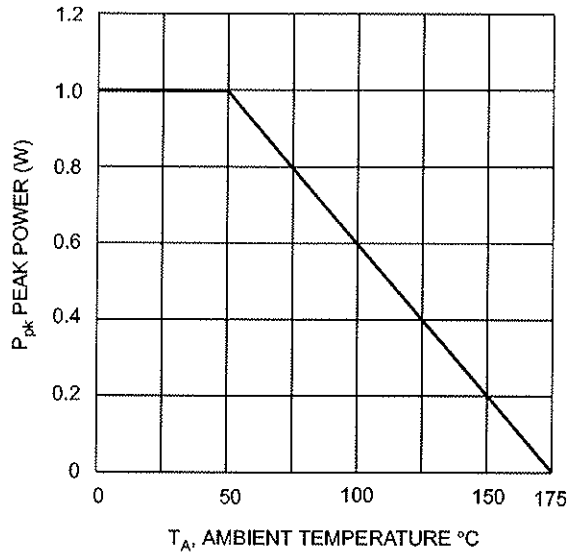


Fig. 1 Power Dissipation vs Ambient Temperature

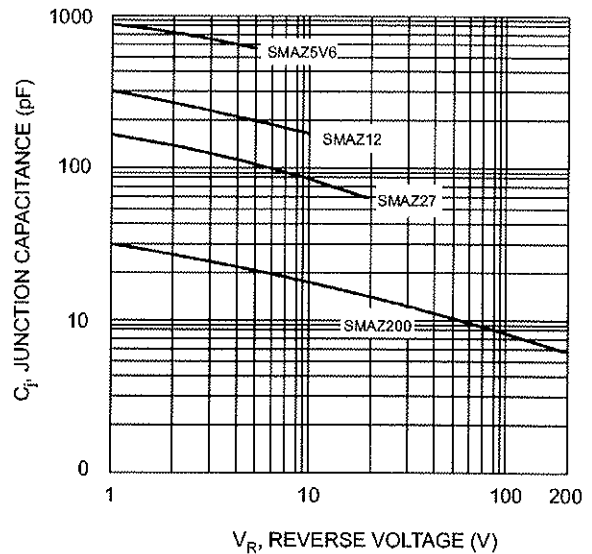


Fig. 2 Junction Capacitance vs Reverse Voltage

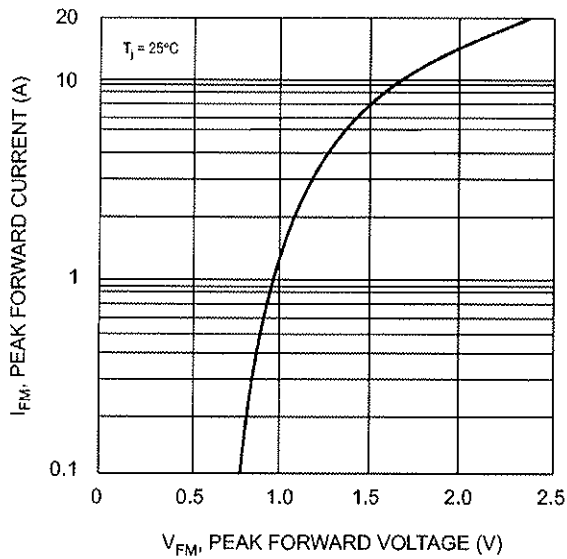


Fig. 3 Peak Forward Current vs Peak Forward Voltage

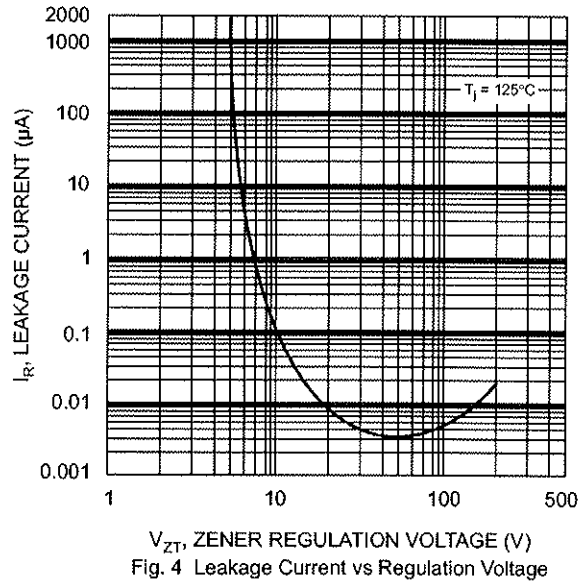


Fig. 4 Leakage Current vs Regulation Voltage

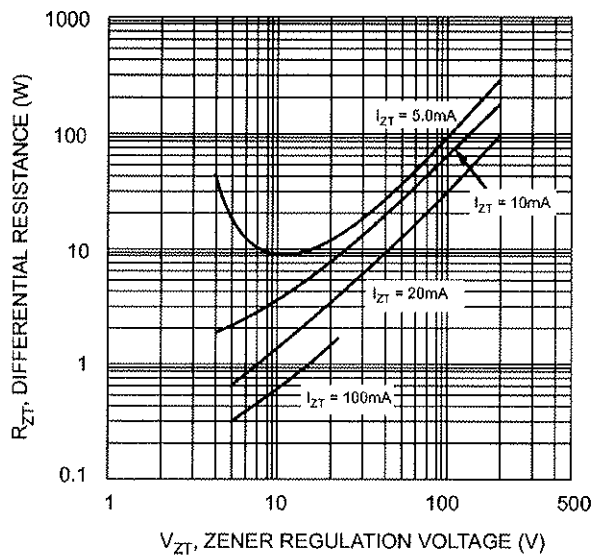


Fig. 5 Differential Resistance vs Regulation Voltage

单击下面可查看定价，库存，交付和生命周期等信息

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