

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

| Characteristic | Symbol | Value | Unit |
|---|---------------------|-------|------|
| Non-Repetitive Peak Reverse Voltage | V _{RM} | 100 | V |
| Peak Repetitive Reverse Voltage | V _{RRM} | 75 | V |
| Working Peak Reverse Voltage | V _{RWM} | | |
| DC Blocking Voltage | V _R | | |
| RMS Reverse Voltage | V _{R(RMS)} | 53 | V |
| Forward Continuous Current (Note 6) | I _{FM} | 300 | mA |
| Non-Repetitive Peak Forward Surge Current | I _{FSM} | 2.0 | A |
| | | 1.0 | |

Thermal Characteristics

| Characteristic | Symbol | Value | Unit |
|---|-----------------------------------|-------------|------|
| Power Dissipation (Note 6) | P _D | 350 | mW |
| Thermal Resistance Junction to Ambient Air (Note 6) | R _{θJA} | 357 | °C/W |
| Operating and Storage Temperature Range | T _J , T _{STG} | -65 to +150 | °C |

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

| Characteristic | Symbol | Min | Max | Unit | Test Condition |
|------------------------------------|--------------------|-----|-------------------------------|----------------------|--|
| Reverse Breakdown Voltage (Note 7) | V _{(BR)R} | 75 | — | V | I _R = 2.5μA |
| Forward Voltage | V _F | — | 0.715 0.855 1.0 1.25 | V | I _F = 1.0mA I _F = 10mA I _F = 50mA I _F = 150mA |
| Reverse Current (Note 7) | I _R | — | 2.5 50 30 25 | μA μA μA nA | V _R = 75V V _R = 75V, T _J = +150°C V _R = 25V, T _J = +150°C V _R = 20V |
| Total Capacitance | C _T | — | 2.0 | pF | V _R = 0, f = 1.0MHz |
| Reverse Recovery Time | t _{rr} | — | 4.0 | ns | I _F = I _R = 10mA, I _{rr} = 0.1 x I _R , R _L = 100Ω |

Notes: 6. Part mounted on Polyimide PC board with pad dimensions 1.13mm x 1.27mm.
7. Short duration pulse test used to minimize self-heating effect.

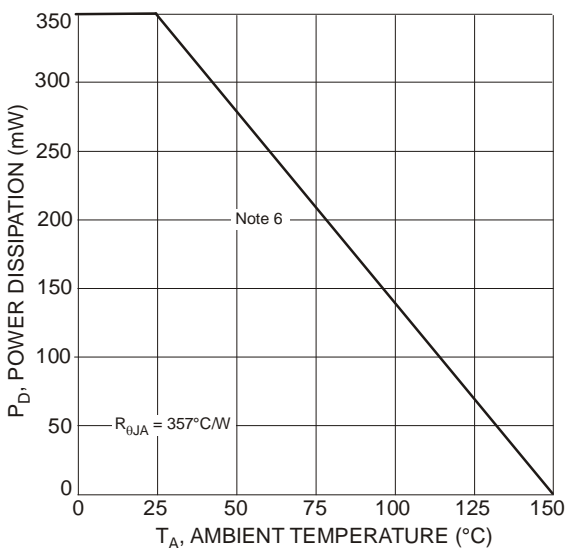


Fig. 1 Power Derating Curve

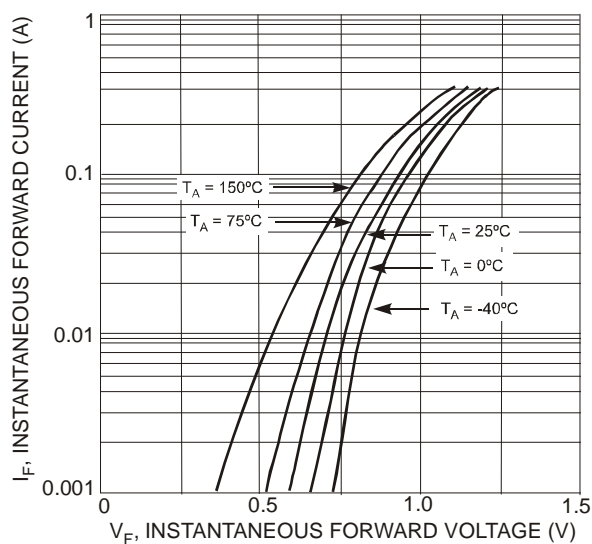


Fig. 2 Forward Characteristics

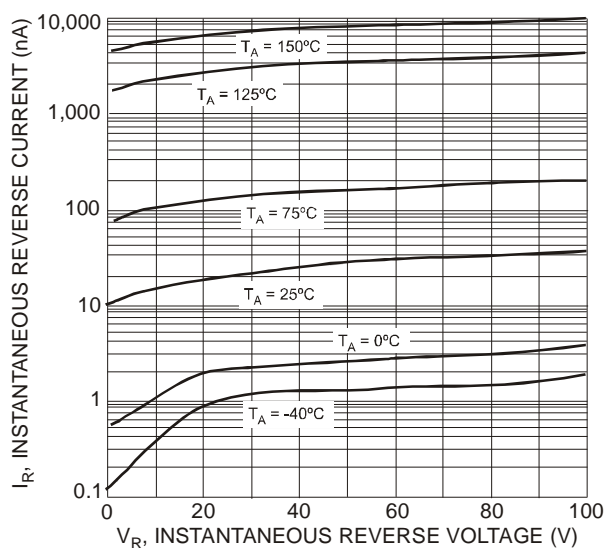


Fig. 3 Typical Reverse Characteristics

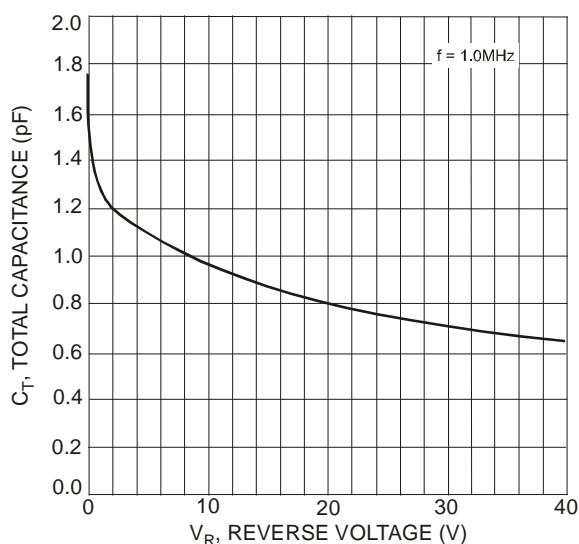
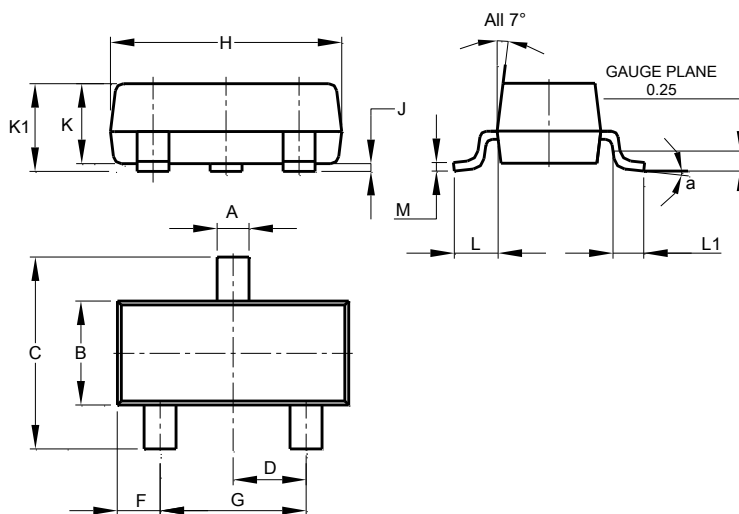


Fig. 4 Typical Capacitance vs. Reverse Voltage

Package Outline Dimensions

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SOT23

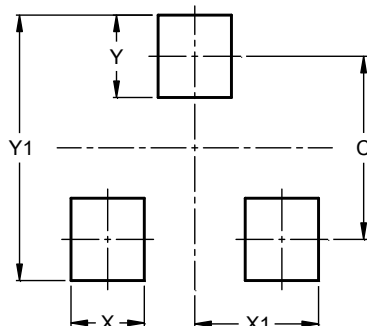


| SOT23 | | | |
|----------------------|-------|-------|-------|
| Dim | Min | Max | Typ |
| A | 0.37 | 0.51 | 0.40 |
| B | 1.20 | 1.40 | 1.30 |
| C | 2.30 | 2.50 | 2.40 |
| D | 0.89 | 1.03 | 0.915 |
| F | 0.45 | 0.60 | 0.535 |
| G | 1.78 | 2.05 | 1.83 |
| H | 2.80 | 3.00 | 2.90 |
| J | 0.013 | 0.10 | 0.05 |
| K | 0.890 | 1.00 | 0.975 |
| K1 | 0.903 | 1.10 | 1.025 |
| L | 0.45 | 0.61 | 0.55 |
| L1 | 0.25 | 0.55 | 0.40 |
| M | 0.085 | 0.150 | 0.110 |
| a | 0° | 8° | -- |
| All Dimensions in mm | | | |

Suggested Pad Layout

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SOT23



| Dimensions | Value (in mm) |
|------------|---------------|
| C | 2.0 |
| X | 0.8 |
| X1 | 1.35 |
| Y | 0.9 |
| Y1 | 2.9 |

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