

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

| Characteristic | Symbol | Value | Unit | Conditions |
|------------------------------------|--------------------------|-------|------|------------------------|
| Peak Pulse Current | I _{PP} | 3.0 | A | 8/20μs, Figure 3 |
| ESD Protection – Contact Discharge | V _{ESD_Contact} | ±8 | kV | Standard IEC 61000-4-2 |
| ESD Protection – Air Discharge | V _{ESD_Air} | ±15 | kV | Standard IEC 61000-4-2 |

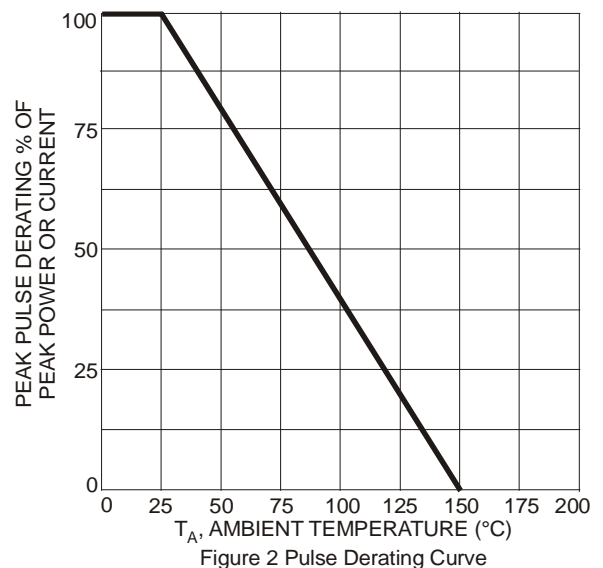
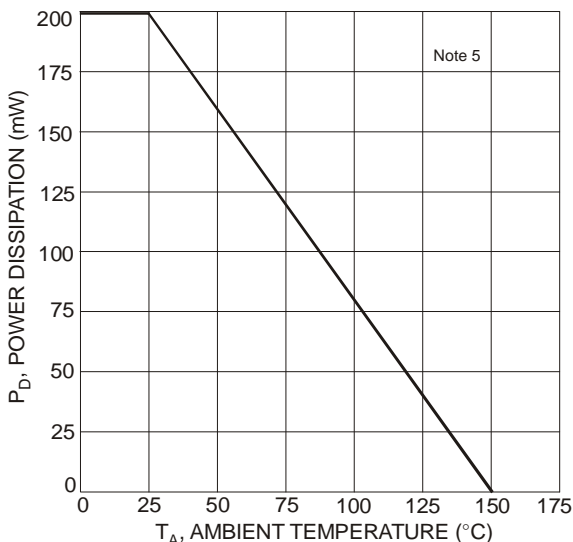
Thermal Characteristics

| Characteristic | Symbol | Value | Unit |
|--|-----------------------------------|-------------|------|
| Power Dissipation (Note 5) | P _D | 200 | mW |
| Thermal Resistance, Junction to Ambient (Note 5) | R _{θJA} | 625 | °C/W |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to +150 | °C |

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

| Characteristic | Symbol | Min | Typ | Max | Unit | Test Conditions |
|--|------------------|-----|-----|------|------|---|
| Reverse Working Voltage | V _{RWM} | — | — | 5.5 | V | — |
| Reverse Current (Note 6) | I _R | — | — | 200 | nA | V _R = 5.5V |
| Reverse Breakdown Voltage | V _{BR} | 6.0 | — | — | V | I _R = 1mA |
| Reverse Clamping Voltage, Positive Transients (Note 7) | V _{CL} | — | 10 | 12 | V | I _{PP} = 1A, t _p = 8/20μs |
| Dynamic Resistance | R _{DYN} | — | 1.0 | — | Ω | I _R = 1A, t _p = 8/20μs |
| Capacitance (Note 8) | C _T | — | 0.4 | 0.65 | pF | V _R = 2.5V, f = 1MHz |
| | | — | 0.5 | — | pF | V _R = 0V, f = 1MHz |

- Notes:
- Device mounted on FR-4 PCB pad layout (2oz copper) as shown on Diodes, Inc. suggested pad layout AP02001, which can be found on our website at <http://www.diodes.com>.
 - Short duration pulse test used to minimize self-heating effect.
 - Clamping voltage value is based on an 8x20μs peak pulse current (I_{pp}) waveform.
 - Measured from any CH to GND.
 - For information on the impact of Diodes' USB 2.0 compatible ESD protectors on signal integrity including eye diagram plots, please refer to AN77 at the following URL: http://www.diodes.com/destdtools/appnote_dnote.html.



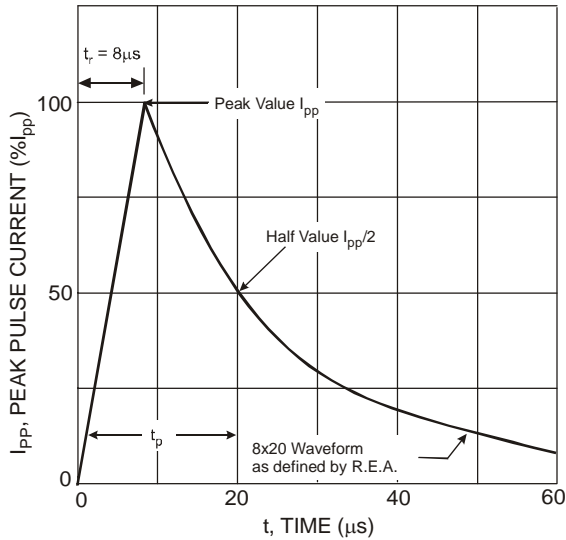


Figure 3 Pulse Waveform

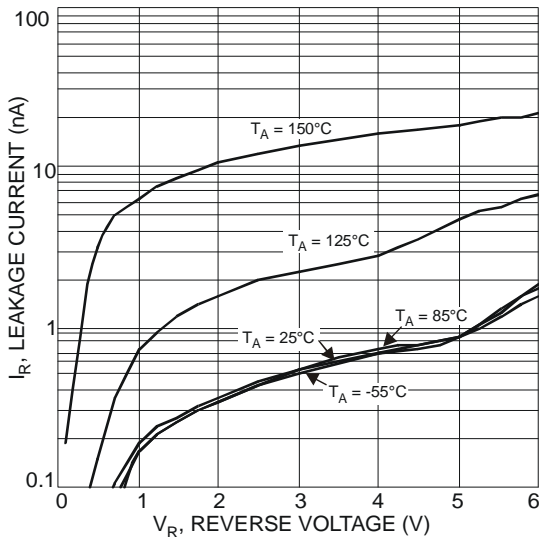


Figure 5 Typical Reverse Characteristics

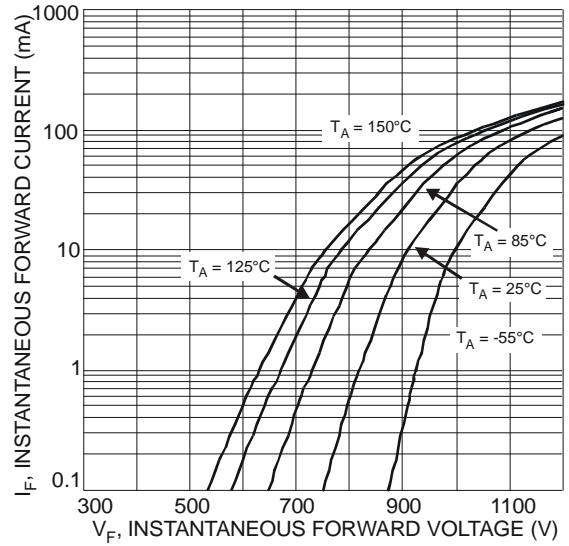


Figure 4 Typical Forward Characteristics

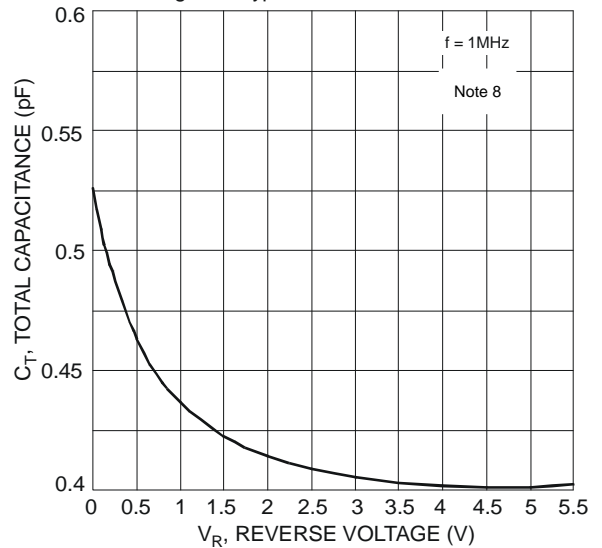
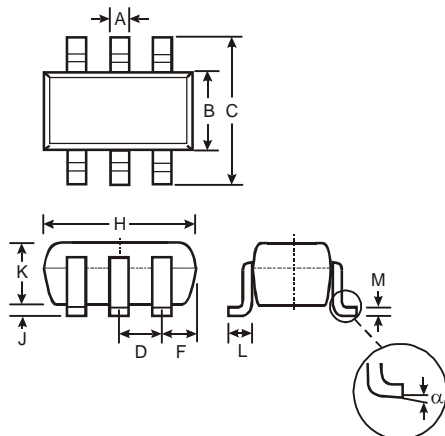


Figure 6 Total Capacitance vs. Reverse Voltage

Package Outline Dimensions

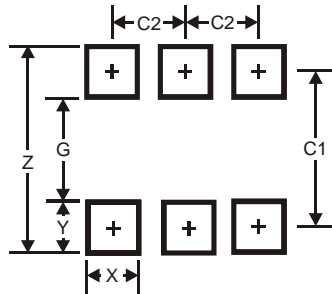
Please see AP02002 at <http://www.diodes.com/datasheets/ap02002.pdf> for latest version.



| SOT363 | | | |
|----------------------|----------|------|-------|
| Dim | Min | Max | Typ |
| A | 0.10 | 0.30 | 0.25 |
| B | 1.15 | 1.35 | 1.30 |
| C | 2.00 | 2.20 | 2.10 |
| D | 0.65 Typ | | |
| F | 0.40 | 0.45 | 0.425 |
| H | 1.80 | 2.20 | 2.15 |
| J | 0 | 0.10 | 0.05 |
| K | 0.90 | 1.00 | 1.00 |
| L | 0.25 | 0.40 | 0.30 |
| M | 0.10 | 0.22 | 0.11 |
| α | 0° | 8° | - |
| All Dimensions in mm | | | |

Suggested Pad Layout

Please see AP02001 at <http://www.diodes.com/datasheets/ap02001.pdf> for the latest version.



| Dimensions | Value (in mm) |
|------------|---------------|
| Z | 2.5 |
| G | 1.3 |
| X | 0.42 |
| Y | 0.6 |
| C1 | 1.9 |
| C2 | 0.65 |

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