

**Maximum Ratings** (@T<sub>A</sub> = +25°C, unless otherwise specified.)

| Characteristic                                                                                                         | Symbol                                                 | Value | Unit |
|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                 | V <sub>RRM</sub><br>V <sub>RWM</sub><br>V <sub>R</sub> | 40    | V    |
| RMS Reverse Voltage                                                                                                    | V <sub>R(RMS)</sub>                                    | 28    | V    |
| Forward Continuous Current (Note 6)                                                                                    | I <sub>FM</sub>                                        | 30    | mA   |
| Non-Repetitive Peak Forward Surge Current @8.3ms<br>Single half sine-wave superimposed on rated load<br>(JEDEC method) | I <sub>FSM</sub>                                       | 200   | mA   |

**Thermal Characteristics**

| Characteristic                              | Symbol                            | Value       | Unit |
|---------------------------------------------|-----------------------------------|-------------|------|
| Power Dissipation (Note 5)                  | P <sub>D</sub>                    | 225         | mW   |
| Thermal Resistance, Junction to Ambient Air | R <sub>θJA</sub>                  | 444         | °C/W |
| Operating and Storage Temperature Range     | T <sub>J</sub> , T <sub>STG</sub> | -40 to +125 | °C   |

**Electrical Characteristics** (@T<sub>A</sub> = +25°C, unless otherwise specified.)

| Characteristic                     | Symbol             | Min | Typ | Max | Unit | Test Condition                  |
|------------------------------------|--------------------|-----|-----|-----|------|---------------------------------|
| Reverse Breakdown Voltage (Note 6) | V <sub>(BR)R</sub> | 40  | —   | —   | V    | I <sub>R</sub> = 10μA           |
| Forward Voltage Drop (Note 6)      | V <sub>F</sub>     | —   | —   | 370 | mV   | I <sub>F</sub> = 1mA            |
| Leakage Current (Note 6)           | I <sub>R</sub>     | —   | —   | 1   | μA   | V <sub>R</sub> = 10V            |
| Total Capacitance                  | C <sub>T</sub>     | —   | 2   | —   | pF   | V <sub>R</sub> = 1V f = 1.0 MHz |

Notes: 5. Device mounted on FR-4 PC board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.  
 6. Short duration pulse test used to minimize self-heating effect.

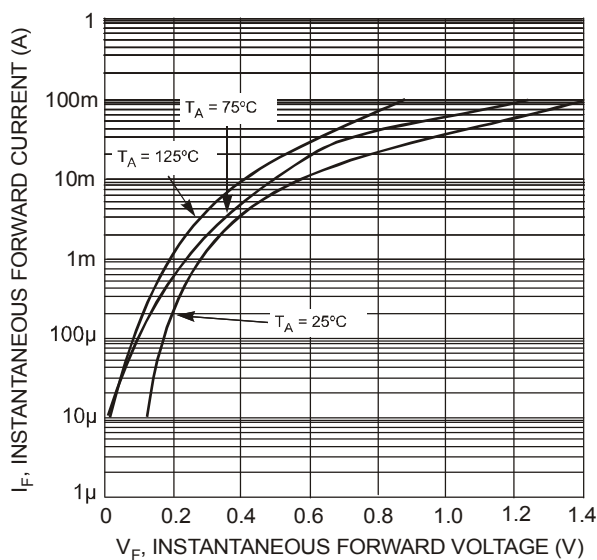


Fig. 1 Typical Forward Characteristics

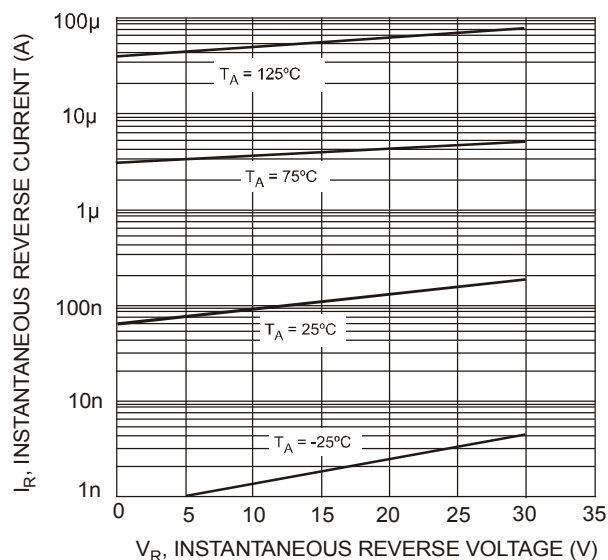
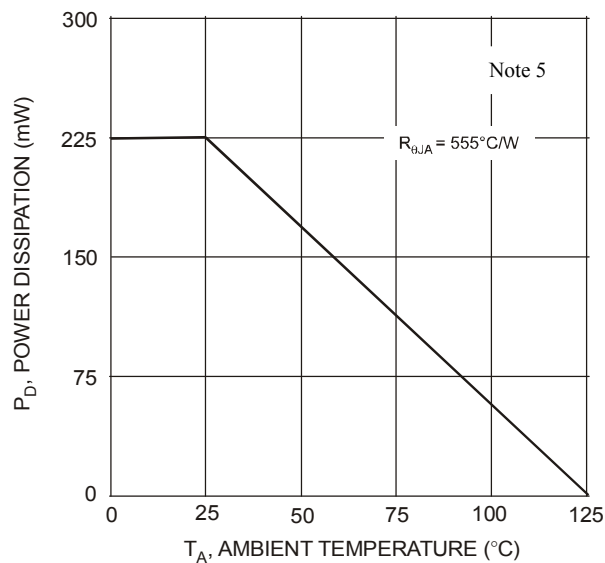
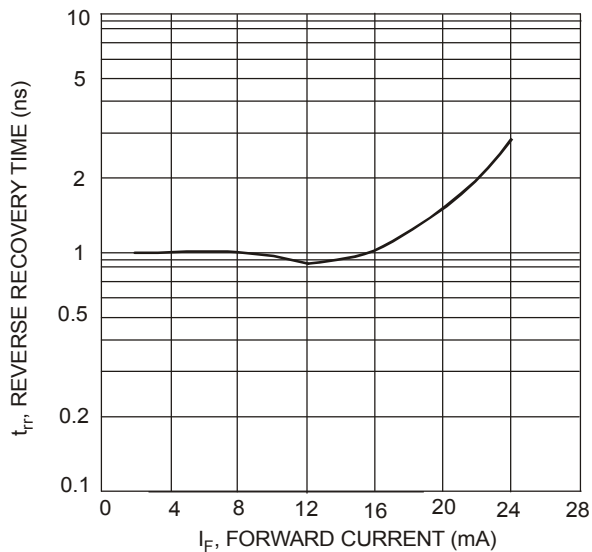
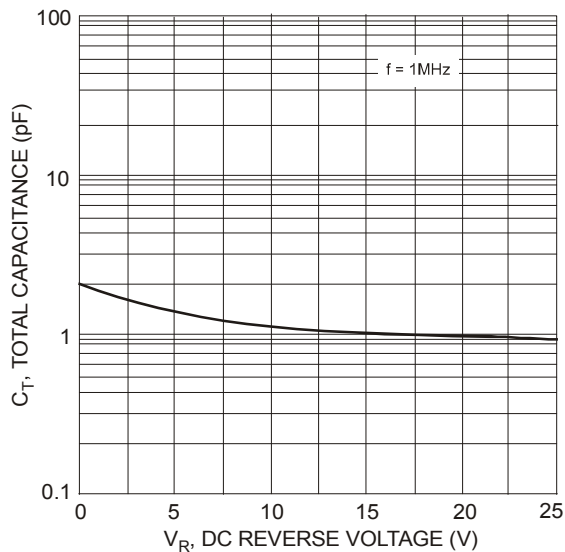
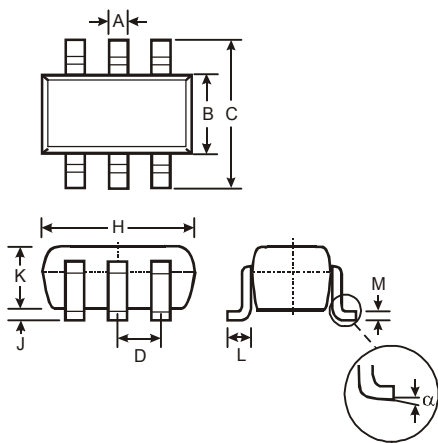


Fig. 2 Typical Reverse Characteristics



## Package Outline Dimensions

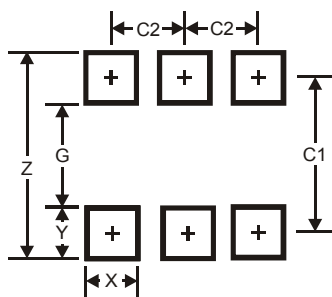
Please see AP02002 at <http://www.diodes.com/datasheets/ap02002.pdf> for the latest version.



| SOT26                |       |      |      |
|----------------------|-------|------|------|
| Dim                  | Min   | Max  | Typ  |
| A                    | 0.35  | 0.50 | 0.38 |
| B                    | 1.50  | 1.70 | 1.60 |
| C                    | 2.70  | 3.00 | 2.80 |
| D                    | —     | —    | 0.95 |
| H                    | 2.90  | 3.10 | 3.00 |
| J                    | 0.013 | 0.10 | 0.05 |
| K                    | 1.00  | 1.30 | 1.10 |
| L                    | 0.35  | 0.55 | 0.40 |
| M                    | 0.10  | 0.20 | 0.15 |
| 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          | 3.20          |
| G          | 1.60          |
| X          | 0.55          |
| Y          | 0.80          |
| C1         | 2.40          |
| C2         | 0.95          |

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