

Small Signal Product

**300mW, Hermetically Sealed Glass Switching Diodes**

**FEATURES**

- Fast switching device ( $t_{rr} < 4.0$  ns)
- Through-hole mount device type
- DO-34 package (JEDEC DO-204)
- Hermetically sealed glass
- Compression bonded construction
- All external surfaces are corrosion resistant and leads are readily solderable
- RoHS compliant
- Solder hot dip Tin (Sn) lead finish
- Cathode indicated by polarity band
- Marking code: 133



DO-34



| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted) |                     |             |      |
|----------------------------------------------------------------------------------------------|---------------------|-------------|------|
| PARAMETER                                                                                    | SYMBOL              | VALUE       | UNIT |
| Power Dissipation                                                                            | P <sub>D</sub>      | 300         | mW   |
| Working Inverse Voltage                                                                      | W <sub>IV</sub>     | 90          | V    |
| Average Rectified Current                                                                    | I <sub>O</sub>      | 150         | mA   |
| Non-Repetitive Peak Forward Current                                                          | I <sub>FM</sub>     | 450         | mA   |
| Peak Forward Surge Current                                                                   | I <sub>FSURGE</sub> | 2           | A    |
| Operating Junction Temperature                                                               | T <sub>J</sub>      | + 175       | °C   |
| Storage Temperature Range                                                                    | T <sub>STG</sub>    | -65 to +200 | °C   |

| PARAMETER               | SYMBOL          | MIN | MAX | UNIT |
|-------------------------|-----------------|-----|-----|------|
| Breakdown Voltage       | B <sub>V</sub>  | 80  | --  | V    |
| Forward Voltage         | V <sub>F</sub>  |     | 1.2 | V    |
| Reverse Leakage Current | I <sub>R</sub>  |     | 500 | nA   |
| Junction Capacitance    | C <sub>j</sub>  | --  | 4.0 | pF   |
| Reverse Recovery Time   | t <sub>rr</sub> | --  | 4.0 | ns   |

Notes: 1. Reverse Recovery Test Conditions: I<sub>F</sub>=I<sub>R</sub>=10mA, R<sub>L</sub>=100Ω, I<sub>RR</sub>=1mA

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### RATINGS AND CHARACTERISTICS CURVES

( $T_A=25^\circ\text{C}$  unless otherwise noted)

Fig. 1 Forward Characteristics

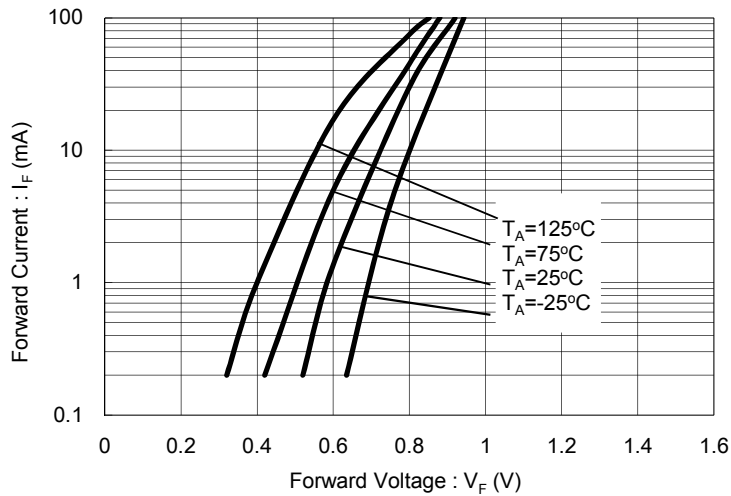


Fig. 2 Reverse Characteristics

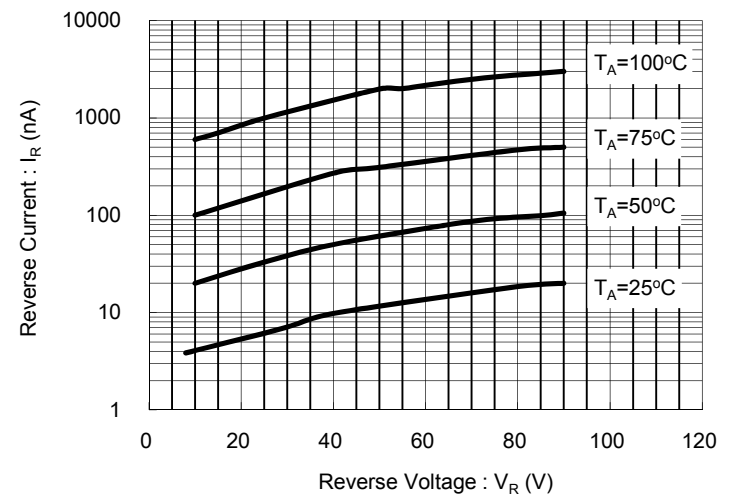


Fig. 3 Capacitance Between Terminals Characteristics

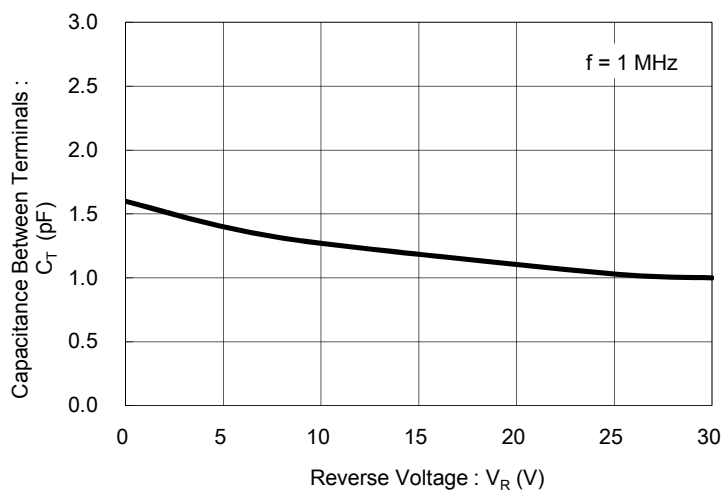


Fig. 4 Reverse Recovery Time Characteristics

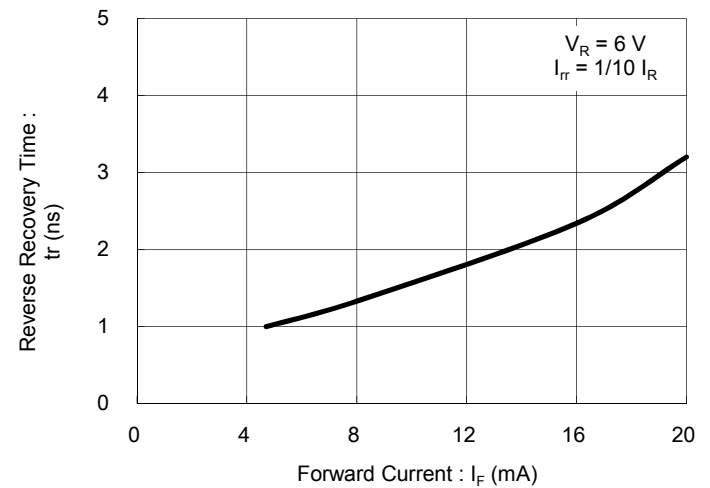


Fig. 5 Surge Current Characteristics

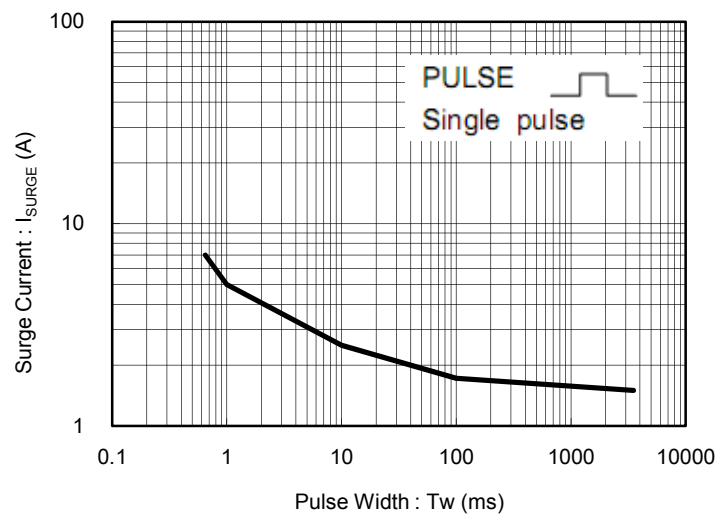
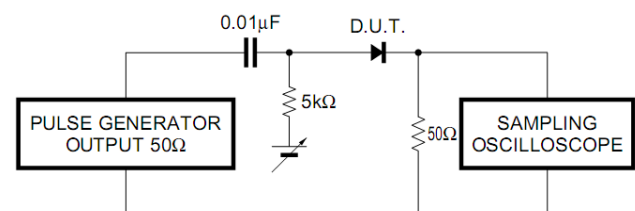
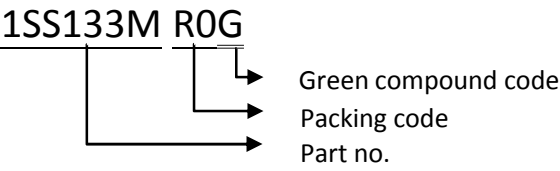


Fig. 6 Reverse Recovery Time ( $t_{rr}$ ) Measurement Circuit

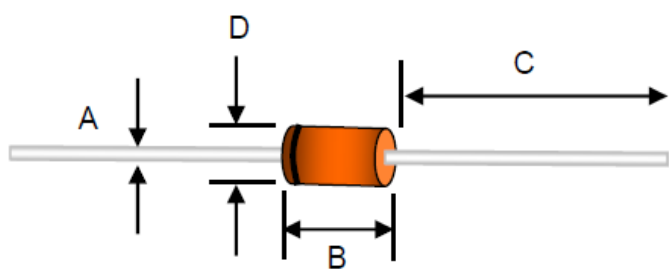


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ORDER INFORMATION (EXAMPLE)



PACKAGE OUTLINE DIMENSIONS



| DIM. | Unit(mm) |       | Unit(inch) |       |
|------|----------|-------|------------|-------|
|      | Min      | Max   | Min        | Max   |
| A    | 0.30     | 0.55  | 0.012      | 0.022 |
| B    | 2.16     | 3.04  | 0.085      | 0.120 |
| C    | 25.40    | 38.10 | 1.000      | 1.500 |
| D    | 1.27     | 2.00  | 0.050      | 0.079 |

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