

Small Signal Product

## Surface Mount Schottky

### FEATURES

- Designed for mounting on small surface
- Extremely thin / leadless package
- Low capacitance
- Low forward voltage drop
- Packing code with suffix "G" means green compound (halogen-free)



1005



### MECHANICAL DATA

- Case: 1005
- Molding compound, UL flammability classification rating 94V-0
- Terminal: Gold plated, solderable per MIL-STD-750, method 2026
- Polarity: Indicated by cathode band
- Weight: 6 mg (approximately)
- Marking code: B2

| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted) |  |              |      |
|--|--|--------------|------|
| PARAMETER  | SYMBOL   | VALUE        | UNIT |
| Repetitive Peak Reverse Voltage  | V <sub>RRM</sub>   | 45           | V    |
| DC Reverse Voltage   | V <sub>R</sub>   | 40           | V    |
| Average Forward Current  | I <sub>O</sub>   | 30           | mA   |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rate Load             | I <sub>FSM</sub>   | 500          | mA   |
| Power Dissipation  | P <sub>d</sub>   | 200          | mW   |
| Forward Voltage  | I <sub>F</sub> = 1.0 mA<br>V <sub>F</sub>                        | 0.37         | V    |
| Reverse Leakage Current  | V <sub>R</sub> = 30 V<br>V <sub>R</sub> = 40 V<br>I <sub>R</sub> | 0.5          | μA   |
|  |  | 1.0          |      |
| Typical Capacitance Between Terminals<br>V <sub>R</sub> = 1 V , f = 1.0 MHz Reverse Voltage  | C <sub>J</sub>   | 1.5          | pF   |
| Junction Temperature   | T <sub>J</sub>   | -40 to + 125 | °C   |
| Storage Temperature  | T <sub>STG</sub>   | -40 to + 125 | °C   |

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RATINGS AND CHARACTERISTICS CURVES

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

Fig.1 Maximum Forward Current Derating Curve

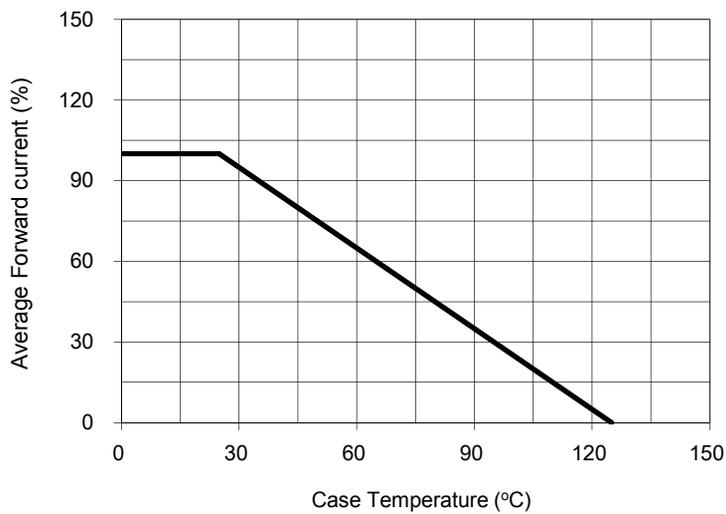


Fig. 2 Typical Reverse Characteristics

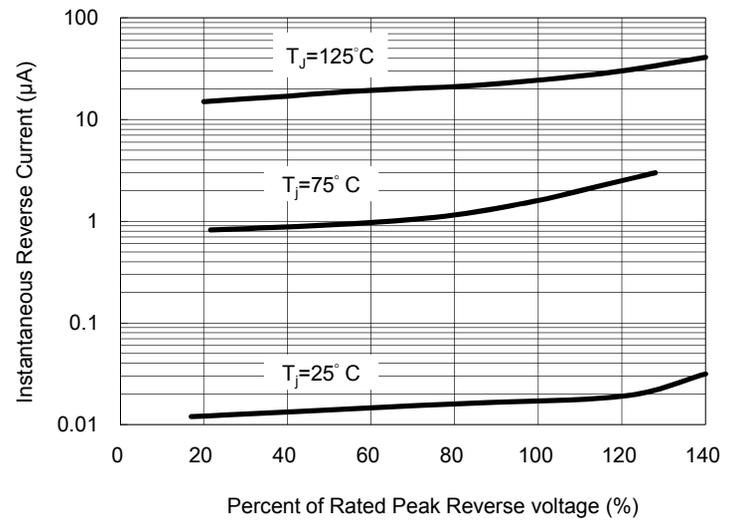


Fig. 3 Maximum Non-Repetitive Forward Surge Current

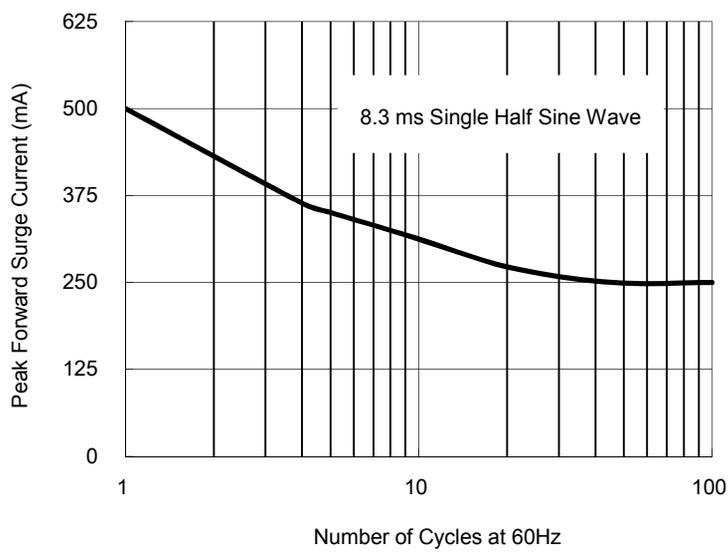


Fig. 4 Typical Junction Capacitance

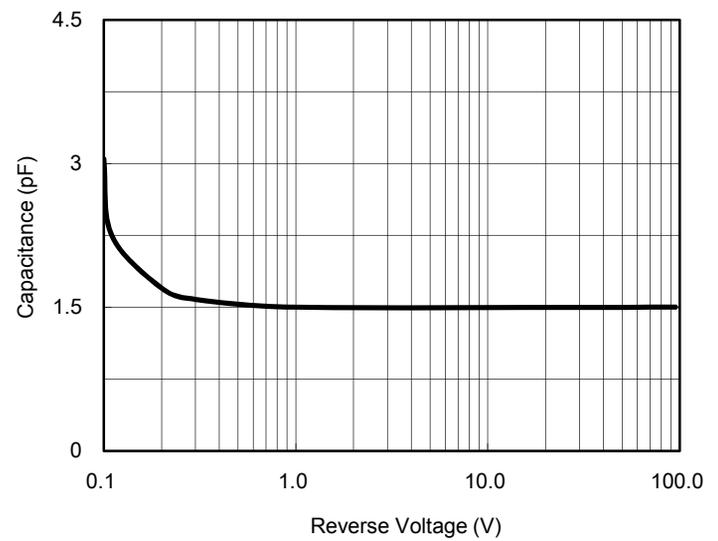
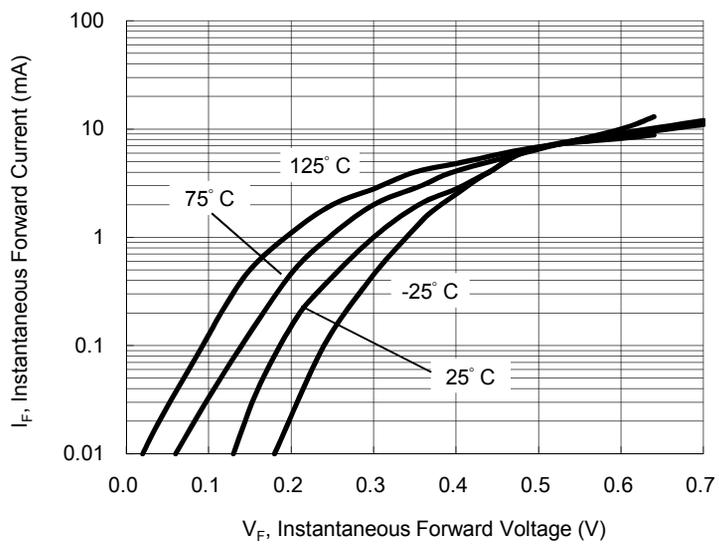


Fig. 5 Forward Characteristics Curve



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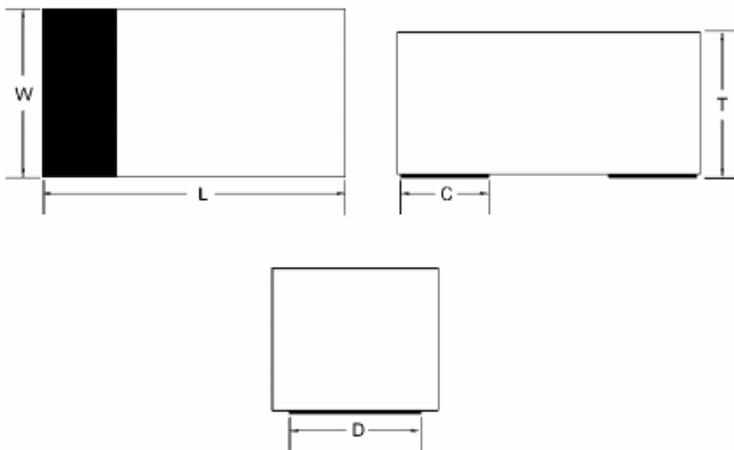
| ORDERING INFORMATION |                          |              |                     |         |              |
|----------------------|--------------------------|--------------|---------------------|---------|--------------|
| PART NO.             | PART NO. SUFFIX (Note 1) | PACKING CODE | PACKING CODE SUFFIX | PACKAGE | PACKING      |
| TSS0340L             | -xx                      | RW           | G                   | 1005    | 4K / 7" Reel |

Note 1: Part No. Suffix „-xx “ would be used for special requirement

| EXAMPLE            |          |                 |              |                     |   |
|--------------------|----------|-----------------|--------------|---------------------|---|
| PREFERRED PART NO. | PART NO. | PART NO. SUFFIX | PACKING CODE | PACKING CODE SUFFIX | DESCRIPTION                                   |
| TSS0340L RWG       | TSS0340L |                 | RW           | G                   | Multiple manufacture source<br>Green compound |
| TSS0340L-F0 RWG    | TSS0340L | -F0             | RW           | G                   | Define manufacture source<br>Green compound   |

PACKAGE OUTLINE DIMENSION

**1005**



| DIM. | Unit (mm) |     |     | Unit (inch) |       |       |
|------|-----------|-----|-----|-------------|-------|-------|
|      | Min       | Typ | Max | Min         | Typ   | Max   |
| L    | 2.4       | -   | 2.6 | 0.094       | -     | 0.102 |
| W    | 1.1       | -   | 1.3 | 0.043       | -     | 0.051 |
| T    | 0.7       | -   | 0.9 | 0.028       | -     | 0.035 |
| C    | -         | 0.5 | -   | -           | 0.020 | -     |
| D    | -         | 1.0 | -   | -           | 0.039 | -     |

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