

Small Signal Product

Surface Mount Schottky Barrier

FEATURES

- Designed for mounting on small surface
- Extremely thin/leadless package
- Low capacitance
- Low forward voltage drop
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



0603

MECHANICAL DATA

- Case: 0603
- Terminal: Gold plated, solderable per MIL-STD-750, method 2026
- Polarity : Indicated by cathode band
- Weight : 3 mg (approximately)
- Marking code: B2

| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted) | | | |
|--|-----------|------------------|------------------|
| PARAMETER | SYMBOL | VALUE | UNIT |
| Repetitive Peak Reverse Voltage | V_{RRM} | 45 | V |
| DC Reverse Voltage | V_R | 40 | V |
| Average Forward Current | I_O | 30 | mA |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rate Load | I_{FSM} | 500 | mA |
| Power Dissipation | P_d | 150 | mW |
| Forward Voltage @ $I_F=1\text{ mA}$ | V_F | 0.37 | V |
| Reverse Leakage Current | I_R | $V_R=30\text{V}$ | 0.5 |
| | | $V_R=40\text{V}$ | 1.0 |
| Typical Capacitance Between Terminals $V_R=1\text{V}$, $f=1.0\text{MHz}$ Reverse Voltage | C_J | 1.5 | pF |
| Junction Temperature | T_J | -40 to +125 | $^\circ\text{C}$ |
| Storage Temperature | T_{STG} | -40 to +125 | $^\circ\text{C}$ |

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RATINGS AND CHARACTERISTICS CURVES

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

Fig.1 Maximum Forward Current Derating Curve

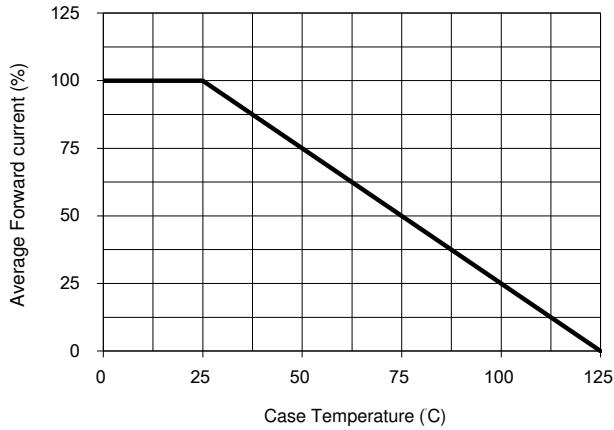


Fig. 2 Typical Reverse Characteristics

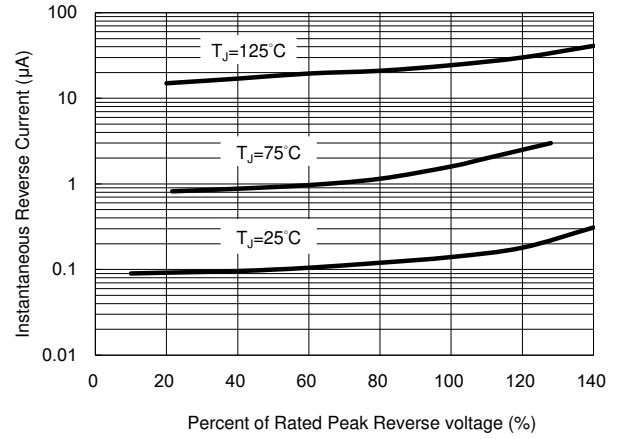


Fig. 3 Maximum Non-Repetitive Forward Surge Current

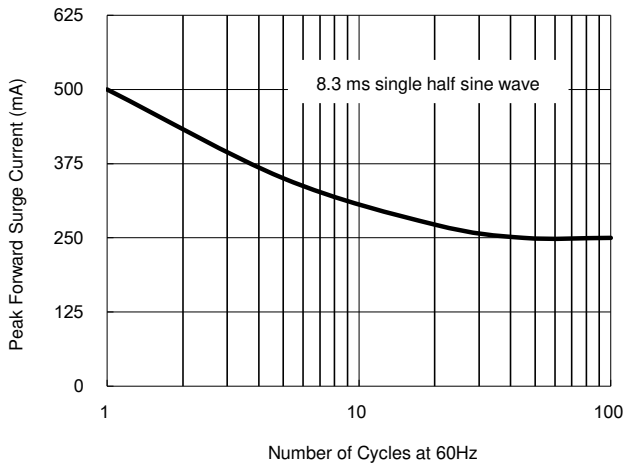


Fig. 4 Typical Junction Capacitance

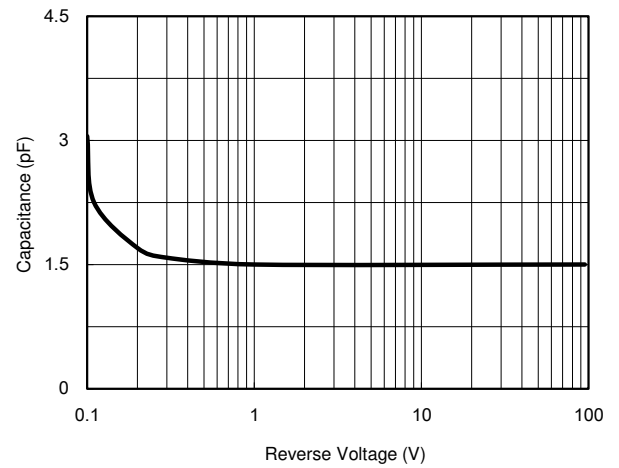
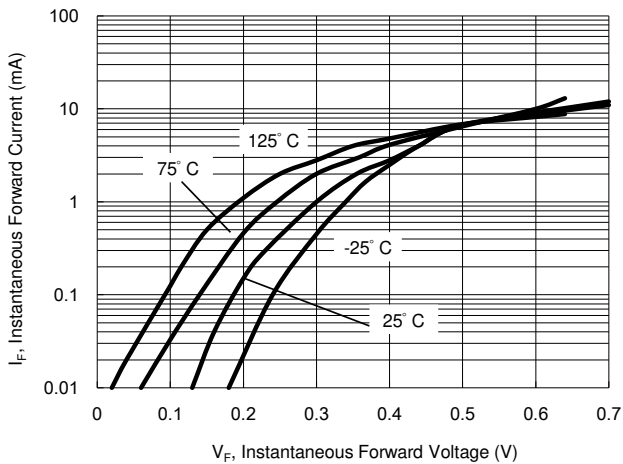


Fig. 5 Forward Characteristics Curve



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ORDERING INFORMATION

| PART NO. | PACKING CODE | PACKING CODE SUFFIX | PACKAGE | PACKING |
|----------|--------------|---------------------|---------|--------------|
| TSS0340U | RG | G | 0603 | 4K / 7" Reel |

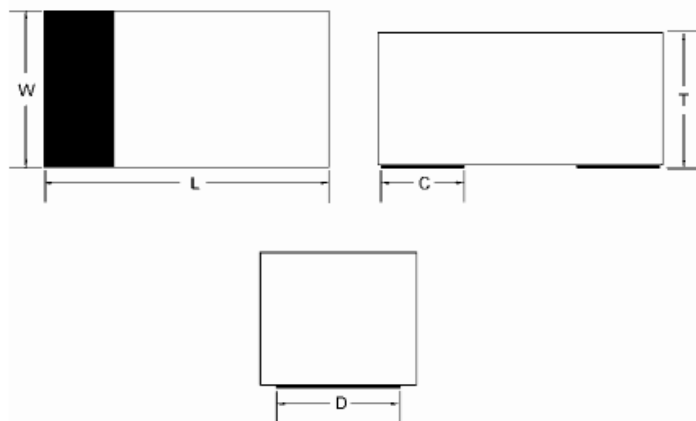
Note: Whole series with green compound

EXAMPLE

| EXAMPLE PART NO. | PART NO. | PACKING CODE | PACKING CODE SUFFIX | DESCRIPTION |
|------------------|----------|--------------|---------------------|----------------|
| TSS0340U RGG | TSS0340U | RG | G | Green compound |

PACKAGE OUTLINE DIMENSION

0603



| DIM. | Unit (mm) | | | Unit (inch) | | |
|------|-----------|------|------|-------------|-------|-------|
| | Min | Typ. | Max | Min | Typ. | Max |
| L | 1.60 | - | 1.80 | 0.063 | - | 0.071 |
| W | 0.80 | - | 1.00 | 0.031 | - | 0.039 |
| T | 0.70 | - | 0.85 | 0.028 | - | 0.033 |
| C | - | 0.45 | - | - | 0.018 | - |
| D | - | 0.70 | - | - | 0.028 | - |

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