

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
- Terminal: Gold plated, solderable per MIL-STD-750, method 2026
- Polarity: Indicated by cathode band
- Weight: 6 mg (approximately)
- Marking code: BF

| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted) | | | |
|--|---------------------|-------------|------|
| PARAMETER | SYMBOL | VALUE | UNIT |
| Repetitive Peak Reverse Voltage | V _{RRM} | 30 | V |
| Reverse Voltage | V _R | 30 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 21 | V |
| Average Forward Current | I _O | 200 | mA |
| Repetitive Peak Forward Current | I _{FRM} | 0.3 | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rate Load | I _{FSM} | 600 | mA |
| Power Dissipation | P _d | 200 | mW |
| Forward Voltage I _F = 0.1 mA I _F = 1 mA I _F = 10 mA I _F = 30 mA I _F = 100 mA | V _F | 0.24 | V |
| | | 0.32 | |
| | | 0.40 | |
| | | 0.50 | |
| | | 1.00 | |
| Reverse Leakage Current V _R = 25 V | I _R | 2 | μA |
| Typical Capacitance Between Terminals V _R = 1 V , f = 1.0 MHz Reverse Voltage | C _J | 10 | pF |
| Reverse Recovery Time (I _F = I _R = 10mA, I _{RR} = 0.1×I _R , R _L =100Ω) | t _{rr} | 5 | ns |
| Junction Temperature | T _J | -65 to +125 | °C |
| Storage Temperature | T _{STG} | -65 to +125 | °C |

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RATINGS AND CHARACTERISTICS CURVES

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

Fig.1 Forward Characteristics

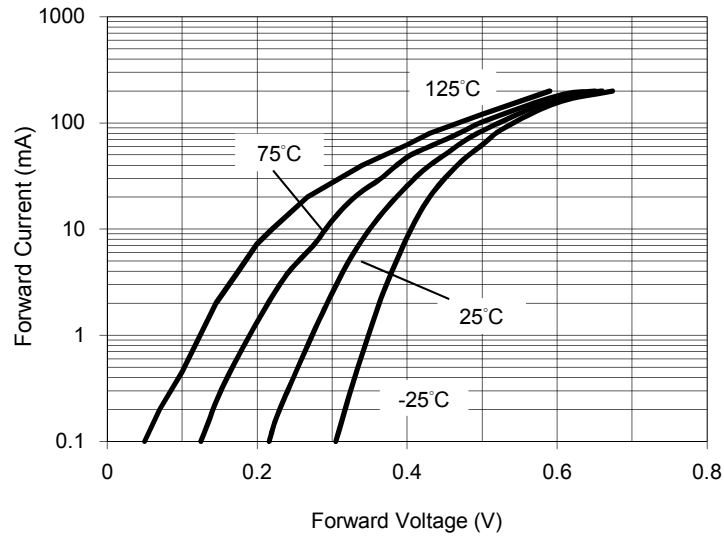


Fig. 2 Reverse Characteristics

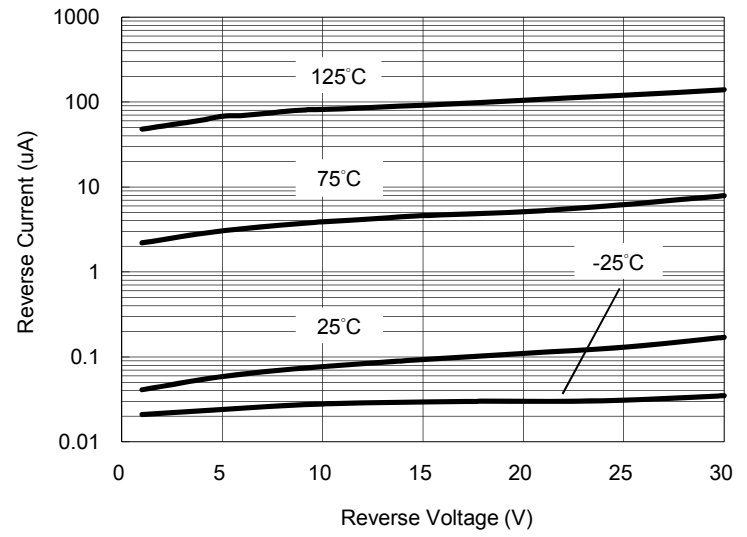


Fig. 3 Capacitance Between Terminals Characteristics

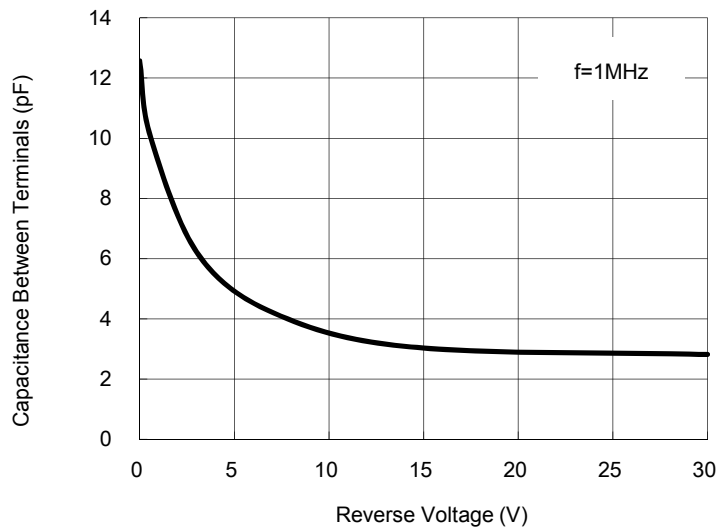
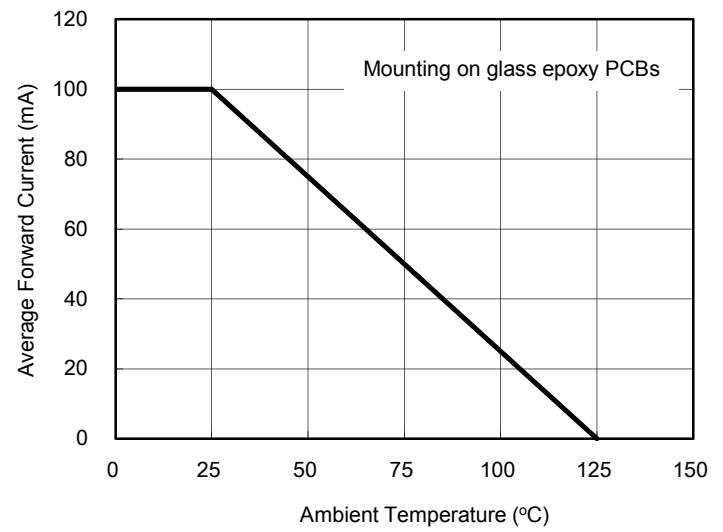


Fig. 4 Current Derating Curve



Small Signal Product

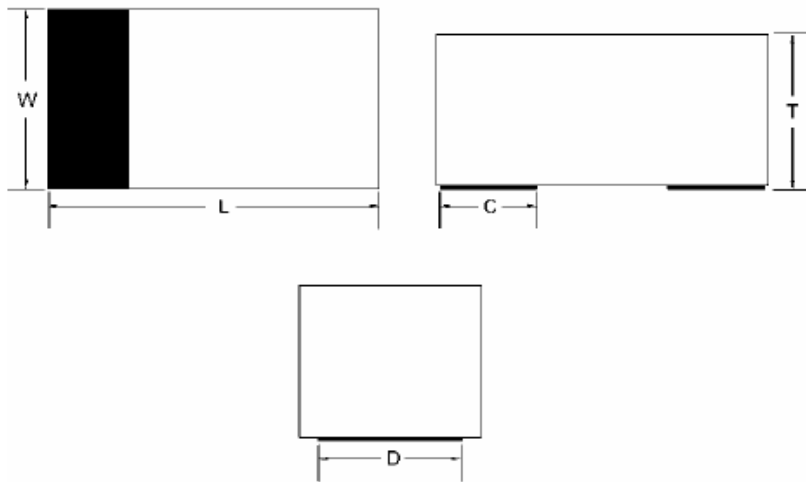
| ORDERING INFORMATION | | | | | |
|----------------------|-----------------|--------------|---------------------|---------|--------------|
| PART NO. | PART NO. SUFFIX | PACKING CODE | PACKING CODE SUFFIX | PACKAGE | PACKING |
| TSS54L | -xx (Note 1) | RW | G | 1005 | 4K / 7" Reel |

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 |
| TSS54L RWG | TSS54L | | RW | G | Multiple manufacture source Green compound |
| TSS54L-F0 RWG | TSS54L | -F0 | RW | G | Define manufacture source Green compound |

PACKAGE OUTLINE DIMENSION

1005



| DIM. | Unit (mm) | | | Unit (inch) | | |
|------|-----------|------|------|-------------|-------|-------|
| | Min | Typ | Max | Min | Typ | Max |
| L | 2.40 | - | 2.60 | 0.094 | - | 0.102 |
| W | 1.10 | - | 1.30 | 0.043 | - | 0.051 |
| T | 0.70 | - | 0.90 | 0.028 | - | 0.035 |
| C | - | 0.50 | - | - | 0.020 | - |
| D | - | 1.00 | - | - | 0.039 | - |

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