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: BG

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ( $T_{A}=25^{\circ} \mathrm{C}$ unless otherwise noted)

| PARAMETER | SYMBOL | V ALUE | UNIT |
| :---: | :---: | :---: | :---: |
| Repetitive Peak Reverse Voltage | $\mathrm{V}_{\text {RRM }}$ | 70 | V |
| Reverse Voltage | $\mathrm{V}_{\mathrm{R}}$ | 70 | V |
| RMS Reverse Voltage | $\mathrm{V}_{\mathrm{R} \text { (RMS) }}$ | 49 | V |
| Average Forward Current | Io | 70 | mA |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rate Load (JEDEC Method) | $I_{\text {FSM }}$ | 100 | mA |
| Power Dissipation | Pd | 200 | mW |
| Forward Voltage $\mathrm{I}_{\mathrm{F}}=1 \mathrm{~mA}$ <br>  $\mathrm{I}_{\mathrm{F}}=15 \mathrm{~mA}$ | $V_{F}$ | $\begin{gathered} \hline 0.41 \\ 1.0 \end{gathered}$ | V |
| Reverse Leakage Current $\quad \mathrm{V}_{\mathrm{R}}=50 \mathrm{~V}$ | $\mathrm{I}_{\mathrm{R}}$ | 0.1 | $\mu \mathrm{A}$ |
| Typical Capacitance Between Terminals $\mathrm{V}_{\mathrm{R}}=0 \mathrm{~V}, \mathrm{f}=1.0 \mathrm{MHz}$ Reverse Voltage | C | 2 | pF |
| Reverse Recovery Time $\left(I_{F}=I_{R}=10 \mathrm{~mA}, I_{R R}=0.1 \times I_{R}, R_{L}=100 \Omega\right)$ | $\mathrm{t}_{\text {rr }}$ | 5 | ns |
| Junction Temperature | $\mathrm{T}_{J}$ | -65 to +125 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature | $\mathrm{T}_{\text {STG }}$ | -65 to +125 | ${ }^{\circ} \mathrm{C}$ |

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## RATINGS AND CHARACTERISTICS CURVES

( $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$ unless otherwise noted)


Fig. 3 Capacitance Between Terminals Characteristics


Fig. 2 Reverse Characteristics


Fig. 4 Current Derating Curve


## ORDERING INFORMATION

| ORDERING INFORMATION |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PART NO. | PART NO. <br> SUFFIX | PACKING CODE | PACKING CODE <br> SUFFIX | PACKAGE | PACKING |
| TSS70L | $-x x$ <br> $(N o t e ~ 1) ~$ | RW | G | 1005 | $4 K / 7$ "Reel |

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

| EXAMPLE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PREFERRED <br> PART NO. | PART NO. | PART NO. <br> SUFFIX | PACKING CODE | PACKING CODE <br> SUFFIX | DESCRIPTION |
| TSS70L RWG | TSS70L |  | RW | G | Multiple manufacture <br> source <br> Green compound |
| TSS70L-FO RWG | TSS70L | -F0 | RW | G | Define manufacture <br> source <br> Green compound |

PACKAGE OUTLINE DIMENSION
1005

| 1005 |
| :--- | :--- |



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