

# TS2100S

## MICRO SURFACE MOUNT SCHOTTKY BRIDGE

**VOLTAGE** 100 Volt **CURRENT** 2 Ampere

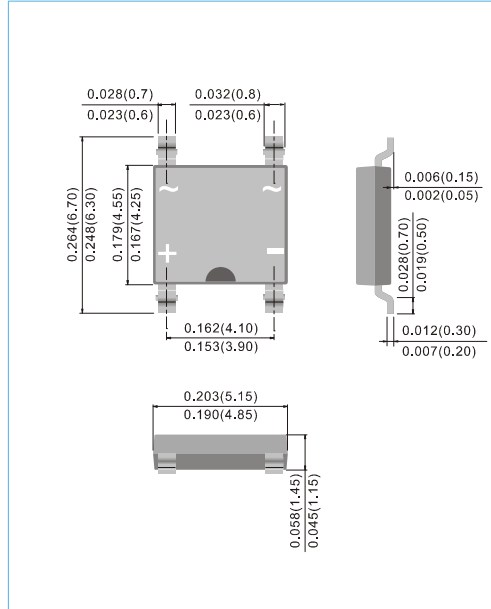
**MICRO DIP / TDI** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory. Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228.
- Low power loss, high efficiency.
- Low forward voltage, high current capability.
- High surge capacity.
- Super fast recovery times, high voltage.
- Epitaxial chip construction.
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std. . (Halogen Free).

### MECHANICAL DATA

- Case: TDI Molded plastic
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.0032 ounce, 0.09 gram



### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

| PARAMETER  | SYMBOL             | VALUE       | UNITS |
|--|--------------------|-------------|-------|
| Maximum Peak Repetitive Reverse Voltage  | V <sub>RRM</sub>   | 100         | V     |
| Maximum RMS Reverse Voltage  | V <sub>RMS</sub>   | 70          | V     |
| Maximum DC Blocking Voltage  | V <sub>R</sub>     | 100         | V     |
| Maximum Average Forward Current T <sub>C</sub> =50°C   | I <sub>F(AV)</sub> | 2           | A     |
| Non-Repetitive Peak Surge Current (Surge applied at rate Load conditions halfware, single phase, 60Hz) | I <sub>FSM</sub>   | 50          | A     |
| Typical Thermal Resistance, Junction to Ambient (Note1)  | R <sub>θJA</sub>   | 95          | °C/W  |
| Operating Junction Temperature Range   | T <sub>J</sub>     | -55 to +125 | °C    |
| Storage Temperature Range  | T <sub>STG</sub>   | -55 to +150 | °C    |

### NOTES :

1. Mounted on minimum pad layout (1cm x 1cm FR-4 board).

# TS2100S

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

| PARAMETER                    | SYMBOL             | CONDITIONS                 | MIN | TYP | MAX. | UNIT |
|------------------------------|--------------------|----------------------------|-----|-----|------|------|
| Reverse Current              | I <sub>R</sub>     | V <sub>R</sub> =100V       | -   | -   | 4    | μA   |
| Reverse Breakdown Voltage    | V <sub>(BR)R</sub> | I <sub>R</sub> =150μA      | 100 | -   | -    | V    |
| Forward Voltage              | V <sub>F</sub>     | I <sub>F</sub> =2A         | -   | 770 | 840  | mV   |
| Typical Junction Capacitance | C <sub>J</sub>     | V <sub>R</sub> =4V, f=1MHz | -   | 110 | -    | pF   |

### RATING AND CHARACTERISTIC CURVES

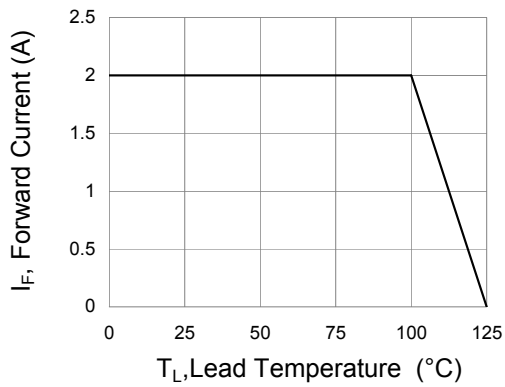


Fig.1 Forward Current Derating Curve

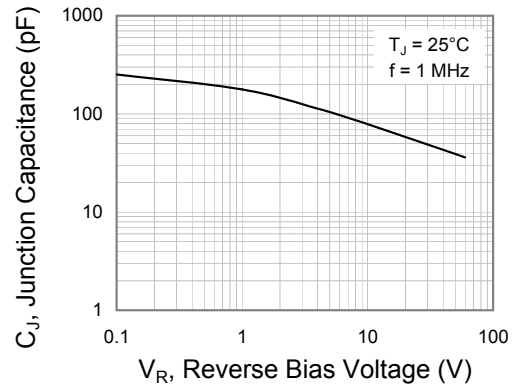


Fig.2 Typical Junction Capacitance

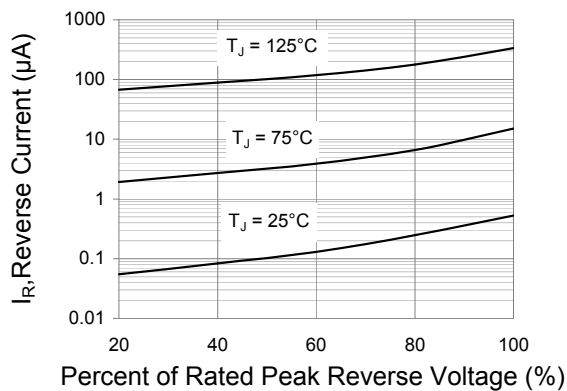


Fig.3 Typical Reverse Characteristics

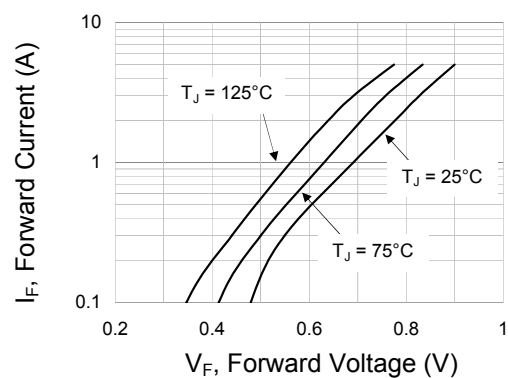
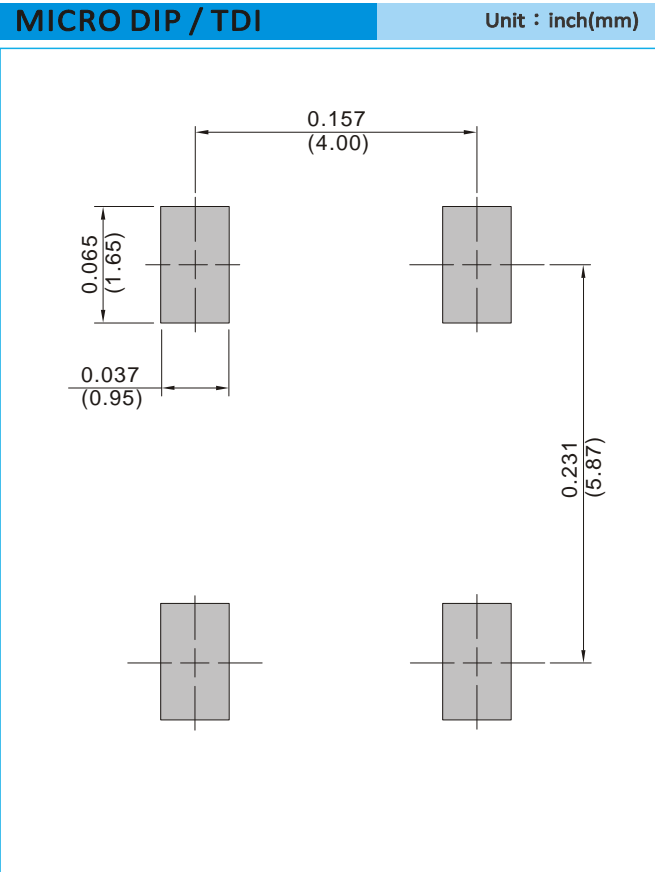


Fig.4 Typical Forward Characteristics

# TS2100S

## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information  
T/R - 4K per 13" plastic Reel  
T/R - 1K per 7" plastic Reel

## TS2100S

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