## Surface Mount Schottky Barrier Bridge Rectifiers

**Reverse Voltage - 40 Volts**
**Forward Current - 1.0 Amperes**

### Features

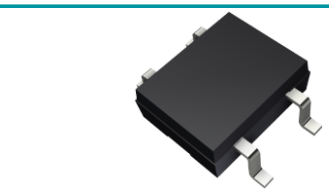
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage,high efficiency.
- High surge capacity.
- Super fast recovery times,high voltage.
- Epitaxial chip construction.
- Lead free in comply with EU RoHS 2002/95/EC directives.

### Mechanical Data

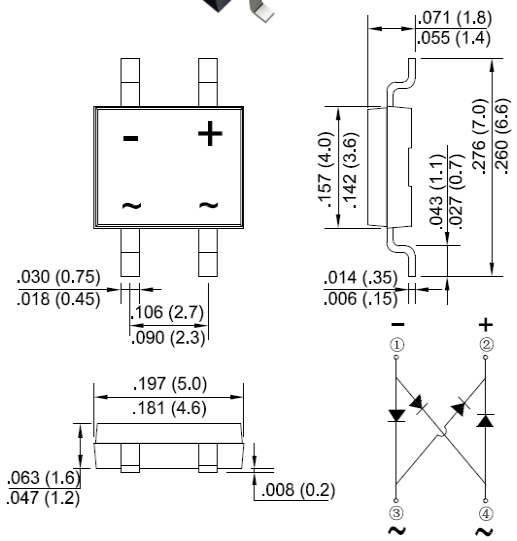
- Polarity:Symbol molded on body
- Mounting position :Any

Note: Products with logo HY or hy are made by HY Electronic (Cayman) Limited.

**BTS**



RoHS COMPLIANT




Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| Characteristics | Symbol | SBT14S | Unit |
|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 40 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 28 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 40 | V |
| Maximum Average Forward Current @$T_C$=50 ℃ | $I_{(AV)}$ | 1 | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method) | $I_{FSM}$ | 30 | A |
| Peak Forward Voltage at 1.0A DC | $V_F$ | 0.55 | V |
| Maximum DC Reverse Current @$T_J$=25℃ | $I_R$ | 0.5 | mA |
| at Rated DC Bolcking Voltage @$T_J$=125℃ | | 50 | |
| Typical Junction Capacitance Per Element (Note1) | $C_J$ | 85 | pF |
| Typical Thermal Resistance (Note3) | $R_{\theta JA}$ | 85 | ℃/W |
| Operating Temperature Range | $T_J$ | -55 to +150 | ℃ |
| Storage Temperature Range | $T_{STG}$ | -55 to +150 | ℃ |

NOTES:1.Measured at1.0MHz and applied reverse voltage of 4.0V DC.
2.The typical data above is for reference only



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Fig. 1 - Forward Current Derating Curve

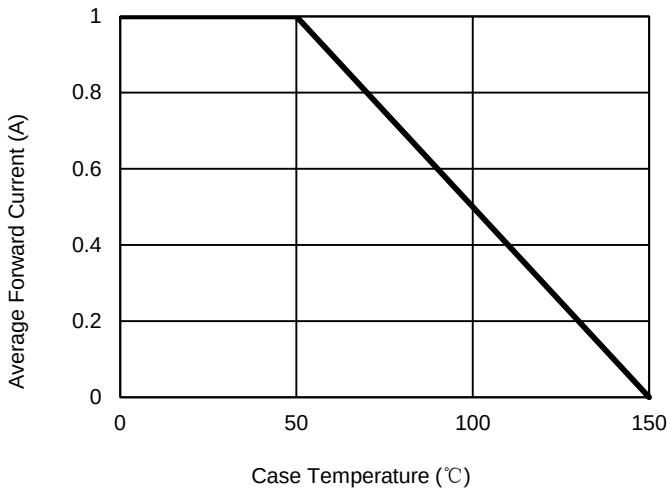



Fig. 2 - Maximum Non-Repetitive Surge Current

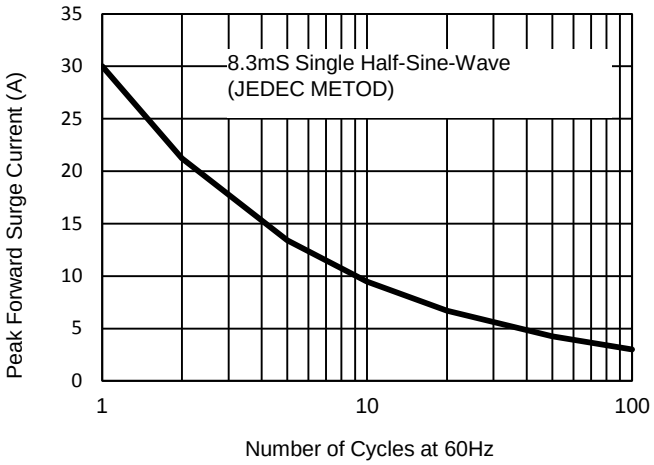



Fig. 3 - Typical Reverse Characteristics

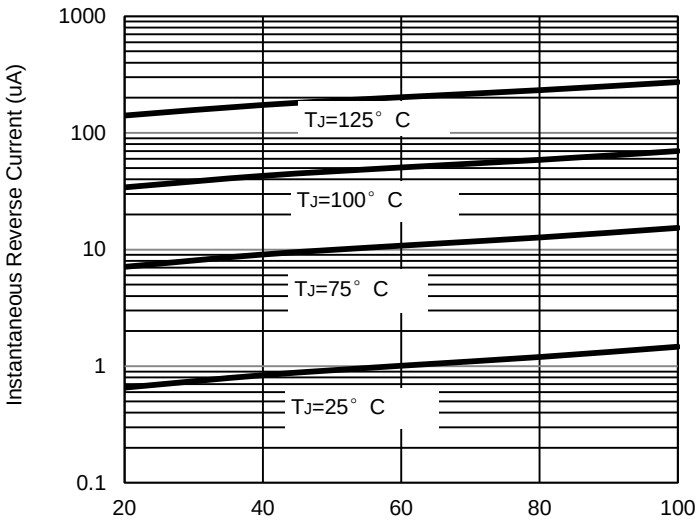
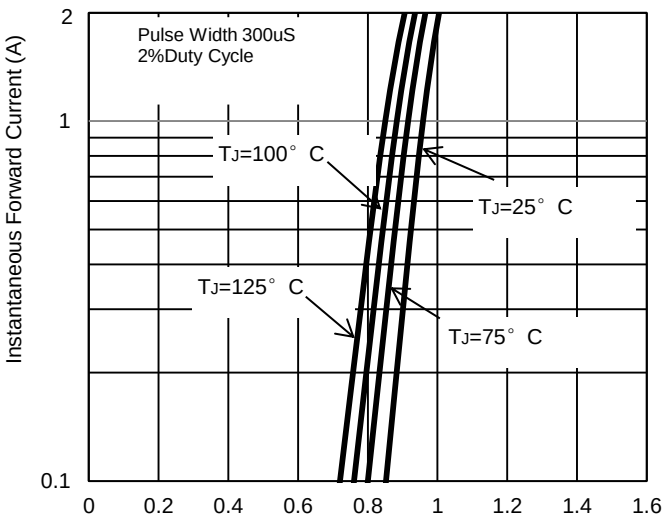



Fig. 4 - Typical Forward Characteristics




The cruve graph is for reference only, can't be the basis for judgment



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