

Kingtronics®**S50VB005 THRU
S50VB100****SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS****REVERSE VOLTAGE 50 to 1000 Volts****FORWARD CURRENT 50 Ampere****FEATURES**

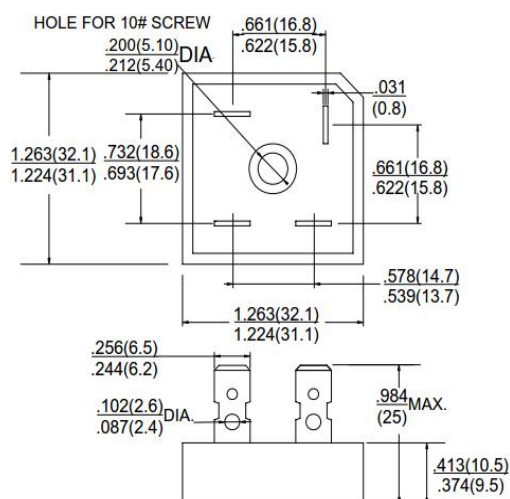
- Rating to 1000V PRV
- High efficiency
- Glass passivated chip junction
- Electrically isolated metal case for maximum heat Dissipation
- The plastic material has UL flammability classification 94V-0
- Electrically isolated base-2500 Vlots

MECHANICAL DATA

- Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation
- Polarity : As marked on Body
- Mounting : Hole for # 10 screw
- Weight : 0.70 ounces , 20 grams (terminal)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Dimensions in inches and (millimeters)

| PARAMETER | SYMBOL | S50VB 005 | S50VB 10 | S50VB 20 | S50VB 40 | S50VB 60 | S50VB 80 | S50VB 100 | UNIT |
|--|-----------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RRM} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @ $T_c=T_a$ | $I_{(AV)}$ | 50.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load | I_{FSM} | 450 | | | | | | | A |
| Maximum Forward Voltage at 17.5A DC | V_F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ $T_J=25^\circ C$ at rated DC blocking voltage @ $T_J=125^\circ C$ | I_R | 5.0 | | | | | | | μA |
| I^2t Rating for Fusing($t<8.3ms$), (Note 1) | I^2t | 800 | | | | | | | A^2S |
| Typical Junction Capacitance per element (Note 2) | C_J | 150 | | | | | | | pF |
| Typical Thermal Resistance | $R_{\theta JC}$ | 1.4 | | | | | | | $^\circ C/W$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ C$ |

1-Measured at non-repetitive, for greater than 1ms and less than 8.3ms

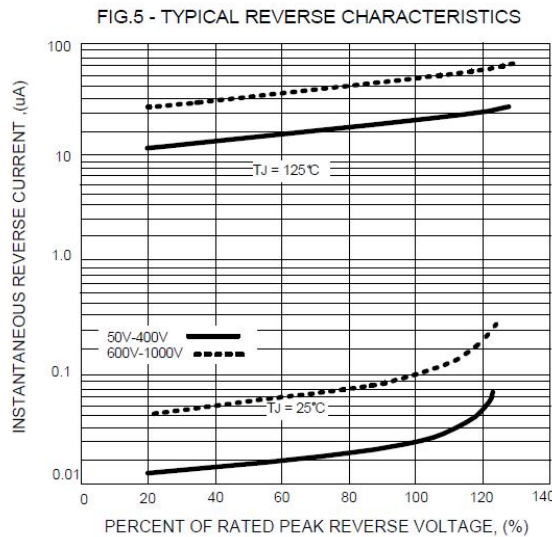
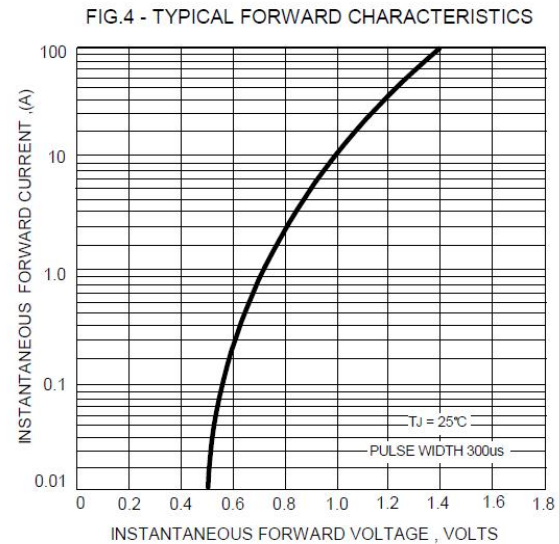
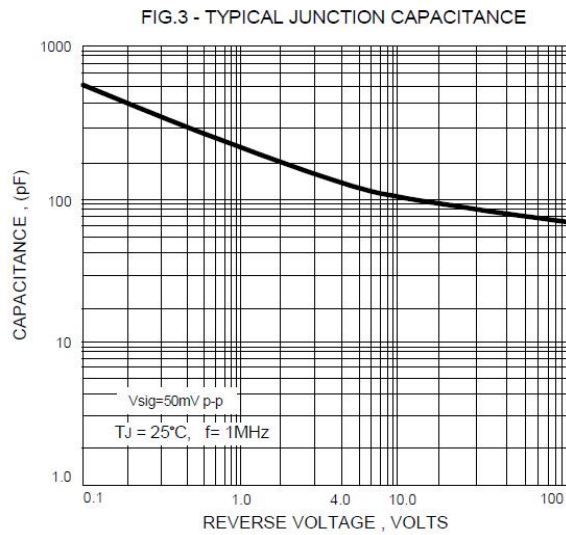
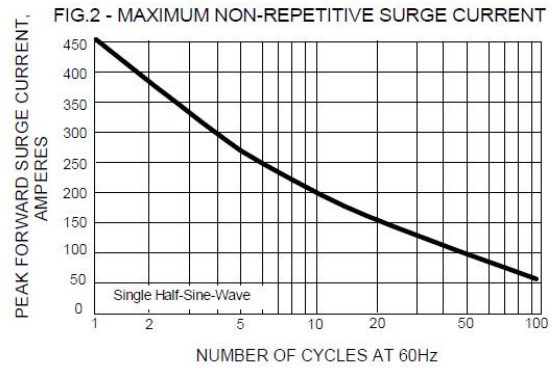
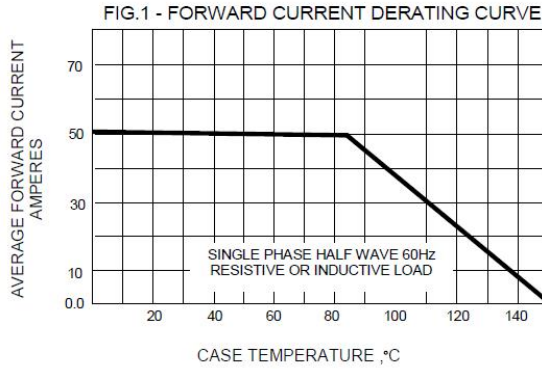
2- Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

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S50VB005 THRU S50VB100

RATINGS AND CHARACTERISTIC CURVES



Note: Specifications are subject to change without notice.

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