



SB 15, 25, 35 SERIES

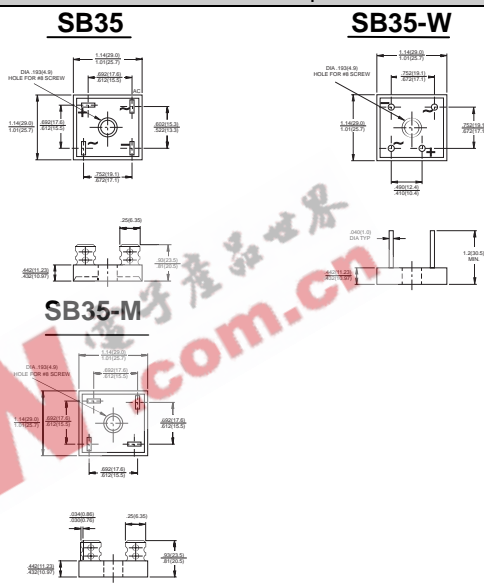
High Current 15, 25, 35 AMPS. Single Phase Bridge Rectifiers



Voltage Range
50 to 1000 Volts
Current
15.0/25.0/35.0 Amperes

Features

- ✧ UL Recognized File # E-96005
- ✧ Glass passivated junction
- ✧ Metal case with an electrically isolated epoxy
- ✧ Rating to 1,000V PRV.
- ✧ High efficiency
- ✧ Mounting: thru hole for #8 screw
- ✧ High temperature soldering guaranteed: 260°C / 10 seconds at 5 lbs., (2.3 kg) tension
- ✧ Leads solderable per MIL-STD-202 Method 208
- ✧ Isolated voltage from case to lead over 2000 volts



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Type Number | Symbol | -05 | -1 | -2 | -4 | -6 | -8 | -10 | Units |
|---|-----------------|---------------------------------------|-----|-----|-----------------------------|-----|-----|------|-------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 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 @ $T_C=55^\circ C$ | $I_{(AV)}$ | | | | 15.0 25.0 35.0 | | | | A |
| Peak Forward Surge Current, Single Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | | | | 200 300 400 | | | | A |
| Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current | V_F | SB15 7.5A SB25 12.5A SB35 17.5A | | | 1.1 | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage Per Element | I_R | | | | 10 | | | | uA |
| Typical Thermal Resistance (Note 1) | $R_{\theta JC}$ | | | | 2.0 | | | | °C/W |
| Operating and Storage Temperature Range | T_J, T_{STG} | | | | - 50 to + 125 / -50 to +150 | | | | °C |

Notes: 1. Thermal Resistance from Junction to Case.

2. Suffix "W" - Wire Lead Structure/"M" - Terminal Location Face to Face.



SB1505 SB1510
 RATINGS AND CHARACTERISTIC CURVES (SB2505 THRU SB2510)
 SB3505 SB3510

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

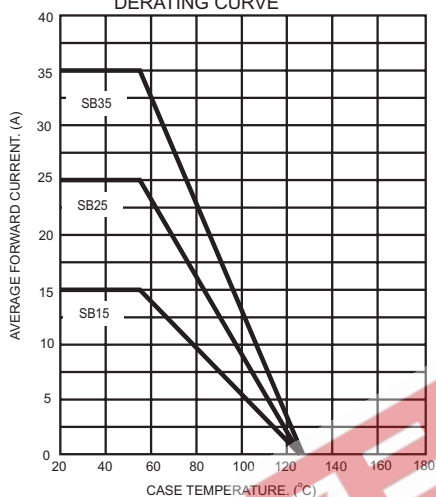


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

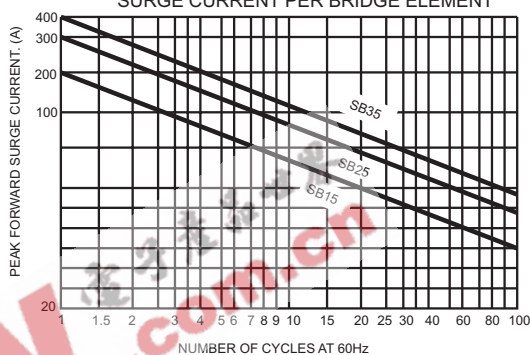


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

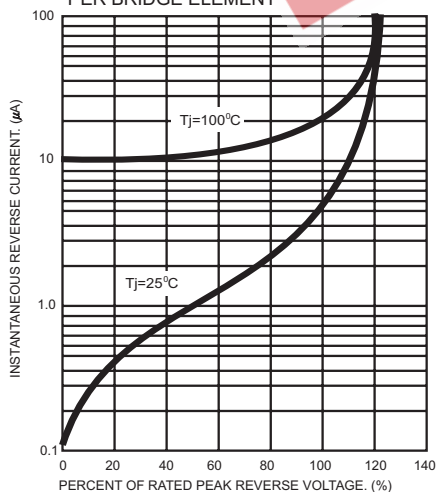


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

