



# SB 15, 25, 35 SERIES

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

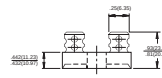
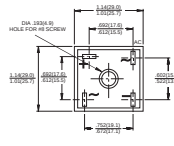


Voltage Range  
50 to 1000 Volts  
Current  
15.0/25.0/35.0 Amperes

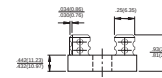
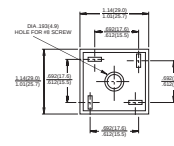
## Features

- ✧ 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

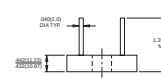
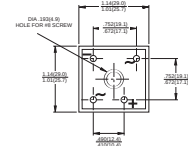
### SB35



### SB35-M



### SB35-W



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<br>@T <sub>C</sub> = 55°C                           | $I_{(AV)}$     | 15.0<br>25.0<br>35.0          |     |     |     |     |     |      | A     |
| Peak Forward Surge Current,<br>Single Sine-wave Superimposed on<br>Rated Load (JEDEC method ) | $I_{FSM}$      | 200<br>300<br>400             |     |     |     |     |     |      | A     |
| Maximum Instantaneous Forward<br>Voltage Drop Per Element<br>at Specified Current             | $V_F$          | 7.5A<br>12.5A<br>17.5A<br>1.1 |     |     |     |     |     |      | V     |
| Maximum DC Reverse Current<br>at Rated DC Blocking Voltage Per Element                        | $I_R$          | 10                            |     |     |     |     |     |      | uA    |
| Typical Thermal Resistance (Note 1)                                                           | $R_{\theta C}$ | 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

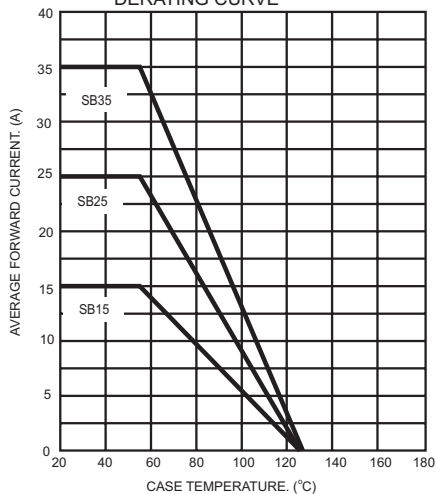


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

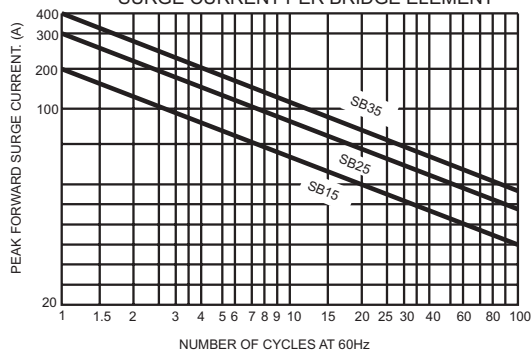


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

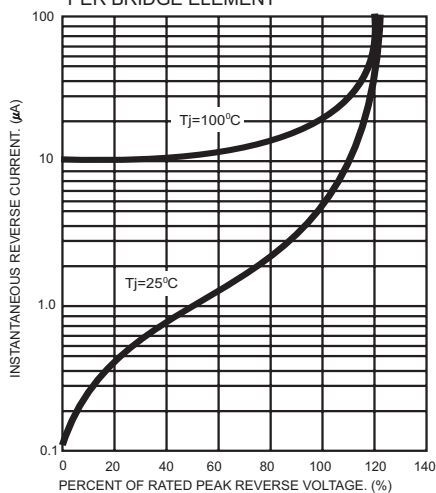


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

