SB 15, 25, 35 SERIES

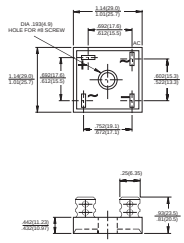
High Current 15, 25, 35 AMPS. Single Phase Bridge Rectifiers

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

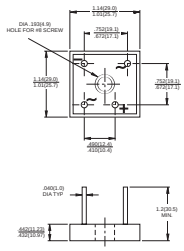
Features

- ✧ 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℃ / 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

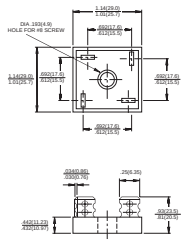
SB35



SB35-W



SB35-M



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ 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℃ SB15 / SB25 / SB35	$I_{(AV)}$	15.0 / 25.0 / 35.0							A
Peak Forward Surge Current, Single Sine-wave Superimposed on Rated Load (JEDEC method) SB15 / SB25 / SB35	I_{FSM}	200 / 300 / 400							A
Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current SB15 7.5A / SB25 12.5A / SB35 17.5A	V_F	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							℃/W
Operating and Storage Temperature Range	T_J , T_{STG}	- 50 to + 125 / -50 to +150							℃

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

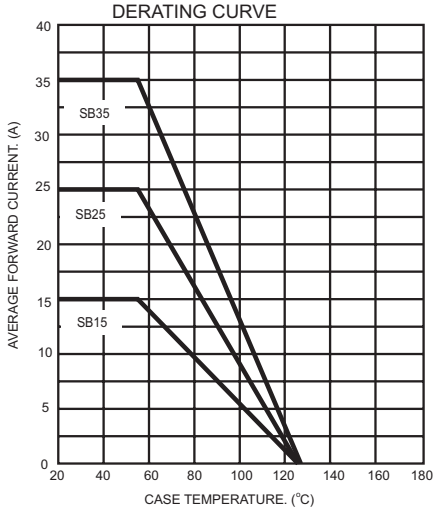


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

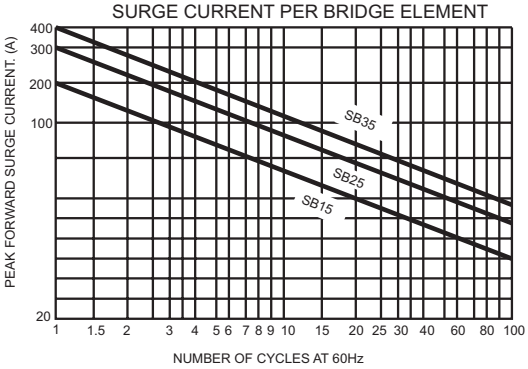


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

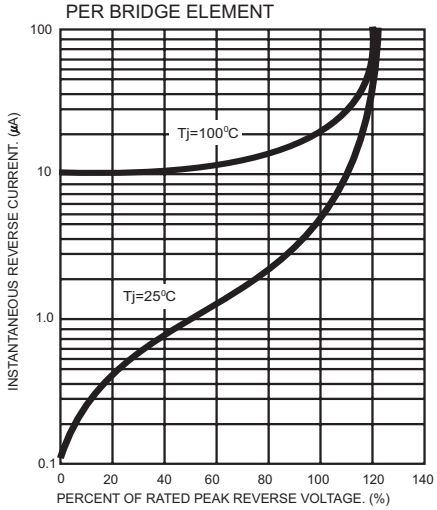


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT