



# SB 15, 25, 35 SERIES

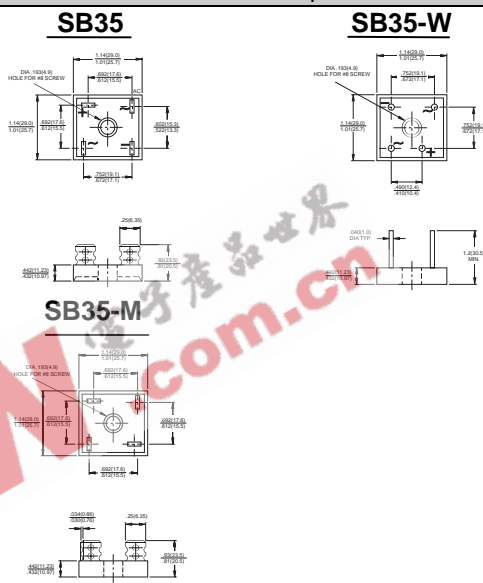
High Current 15, 25, 35 AMPS. Single Phase Bridge Rectifiers



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

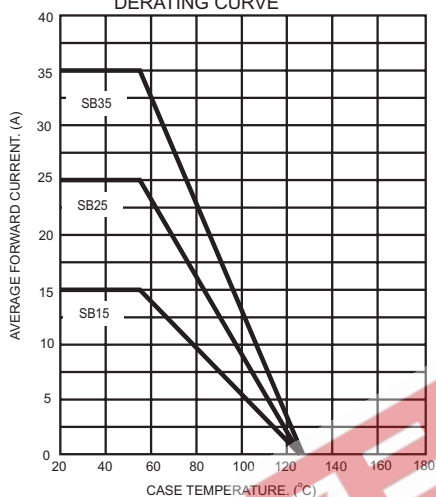


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

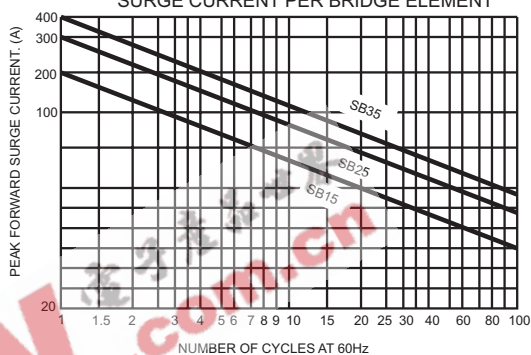


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

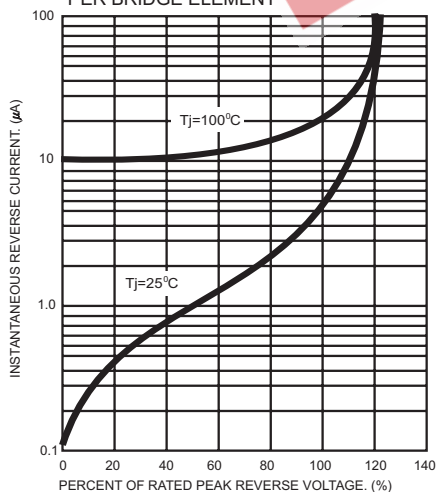


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

