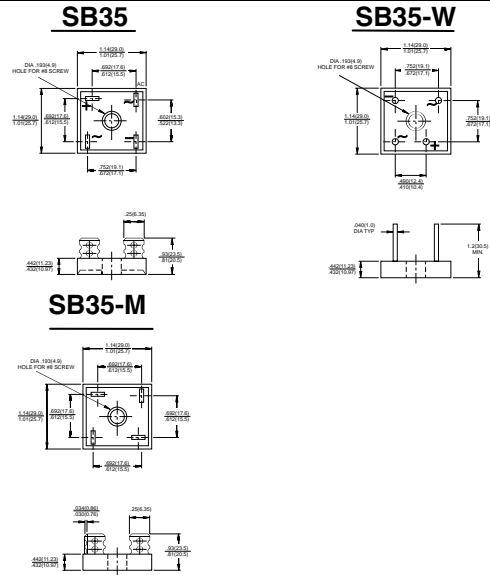# SB 15, 25, 35 SERIES

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

TSC

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

Features

♦ UL Recognized File # E-96005
♦ 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 SB15 Rectified Current SB25 @T$_C$= 55℃ SB35	$I_{(AV)}$	15.0 25.0 35.0							A
Peak Forward Surge Current, SB15 Single Sine-wave Superimposed on SB25 Rated Load (JEDEC method) SB35	I_{FSM}	200 300 400							A
Maximum Instantaneous Forward SB15 7.5A Voltage Drop Per Element SB25 12.5A at Specified Current 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.

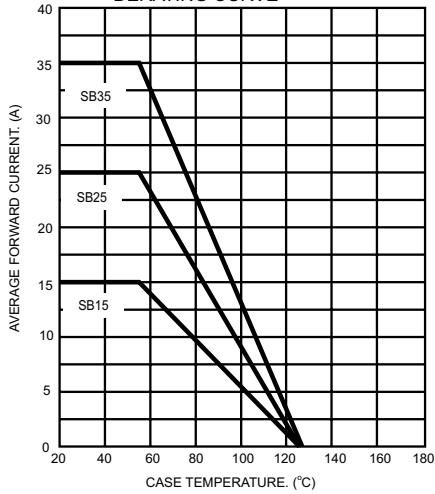FIG.1- MAXIMUM FORWARD CURRENT
DERATING CURVE

FIG.2- MAXIMUM NON-REPETITIVE FORWARD
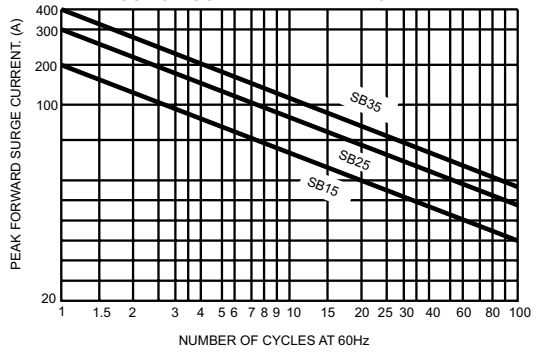SURGE CURRENT PER BRIDGE ELEMENT
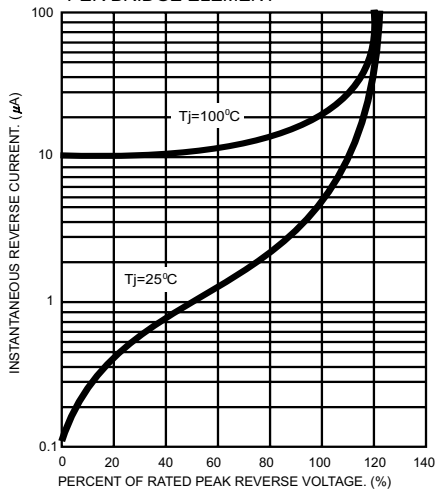
FIG.3- TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

FIG.4- TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT