

646-805



# SB 15, 25, 35 SERIES

HIGH CURRENT 15, 25, 35 AMPS SINGLE PHASE BRIDGE RECTIFIERS



## FEATURES

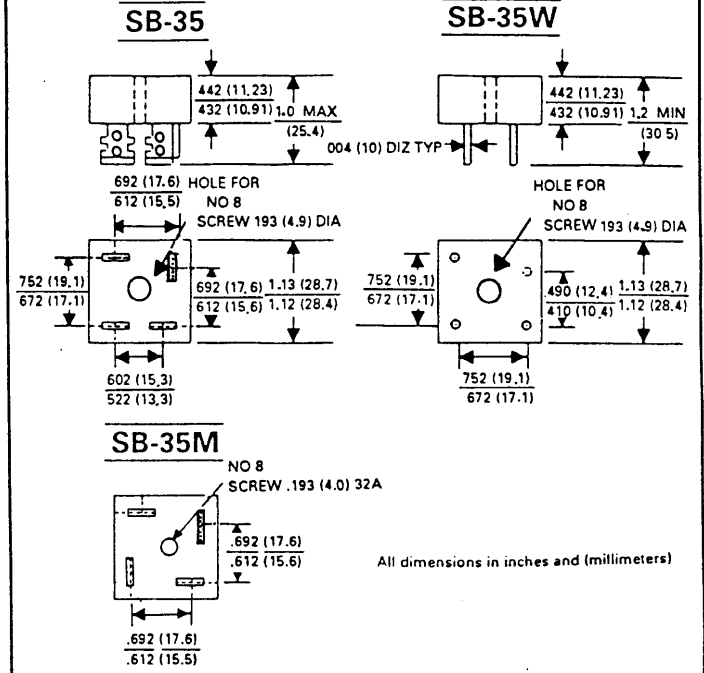
- \* UL Recognized File # E-96005
- \* Metal case with an electrically isolated mylar
- \* Rating to 1,000V PRV.
- \* 300 ampere surge capability
- \* High efficiency
- \* Mounting: thru hole for #8 screw
- \* Terminals solderables per MIL-STD-202. method 208
- \* Isolated voltage from case to lead over 2000 volts

## VOLTAGE RANGE

50 to 1000 Volts

## CURRENT

15.0/25.0/35.0 Amperes



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

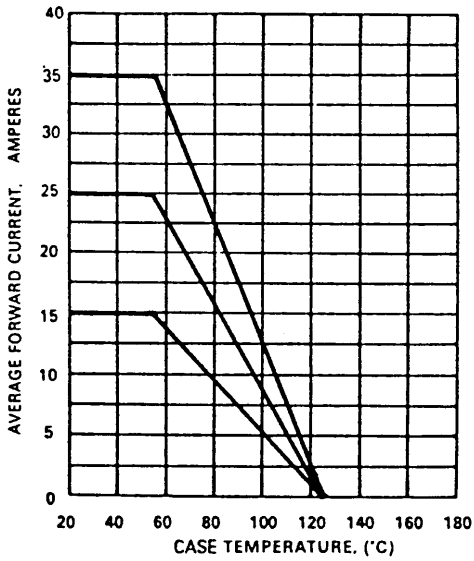
TYPE NUMBER	SYMBOLS	- 05	- 1	- 2	- 4	- 6	- 8	- 10	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at $T_c=55^\circ C$	$I_{(AV)}$	SB 15	SB 25	SB 35	15.0	25.0	35.0		Amps
Peak Forward Surge Current Single sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	SB 15	SB 25	SB 35	300	300	400		Amps
Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current	$V_F$	SB 15 7.5A	SB 25 12.5A	SB 35 17.5A	1.1				Volts
Maximum Reverse DC Current at Rated DC Blocking Voltage Per Element	$I_R$				10.0				$\mu A$
Typical Thermal Resistance	$R_{\theta JC}$				2.0				$^\circ C/W$
Operating and Storage Temperature Range	$T_j, T_{STG}$				-50 to +125	/	-50 to +150		$^\circ C$

- NOTES: 1. Thermal Resistance from Junction to Case.  
 2. Special Silicon Bridge rectifier is available.  
 3. Suffix "G" - Glass Passivated Chip/"W" - Wire Lead Structure/"M" - Terminal Location Face to Face

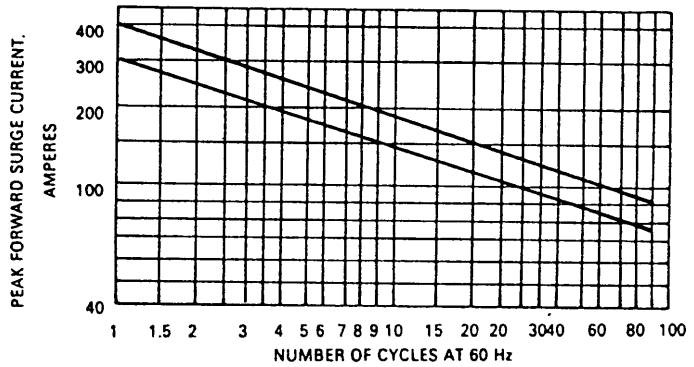


**SB1505      SB1510**  
**RATINGS AND CHARACTERISTIC CURVES (SB2505 THRU SB2510)**  
**SB3505      SB3510**

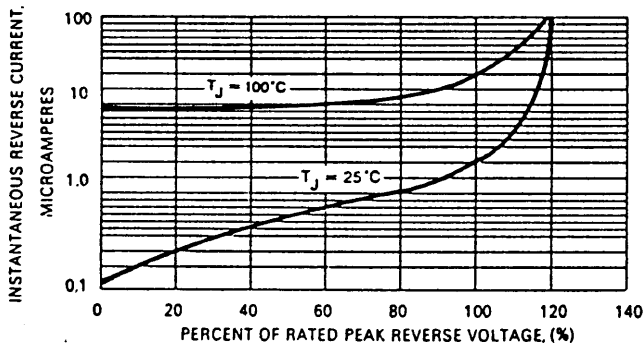
**FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3-TYPICAL REVERSE CHARACTERISTICS**



**FIG.4 TYPICAL FORWARD CHARACTERISTICS**

