SILICON PASSIVATED THREE PHASE BRIDGE RECTIFIERS

REVERSE VOLTAGE - **50** to **1600** Volts

FORWARD CURRENT - **15** Ampreres

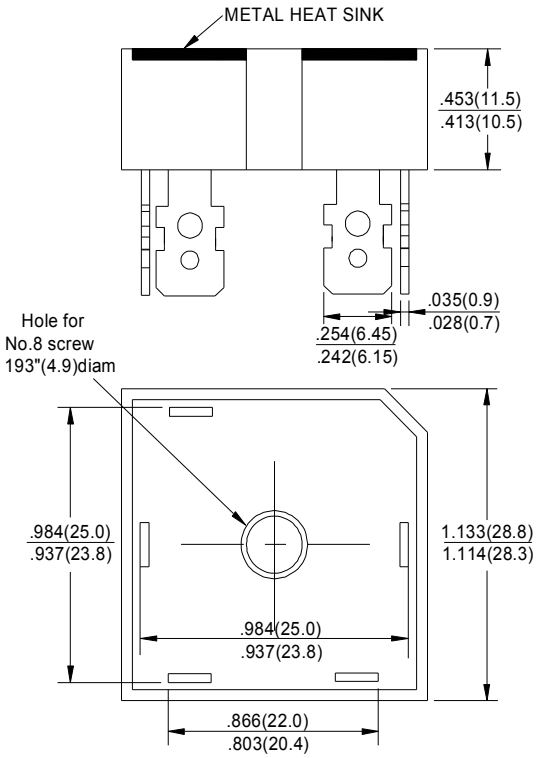
FEATURES

- ●Diffused Junction
- ●Low Forward Voltage Drop
- ●High Current Capability
- ●High Reliability
- ●High Surge Current Capability
- ●Ideal for Printed Circuit Boards

MECHANICAL DATA

- ●Case:Epoxy Case with Heat Sink Interally Mounted in the Bridge Encapsulation
- ●Terminals:Plated Leads Soiderable per MIL-STD-202,Method 208
- ●Polarity:As Marked on Body
- ●Weight:20 grams(approx.)
- ●Mounting Position: Bolt Down on Heatsink With Silicone Thermal Compound Between Bridge and Mounting Surface for Maximum Heat Transfer Efficiency
- ●Mounting Torque:20 in lbs. Max.
- ●Marking:Type Number

SBR



Dimensions in inches and (milimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.For capacitive load, derate current by 20%

VOLTAGE RATINGS

CHARACTERISTICS	SYMBOL	-00	-01	-02	-04	-06	-08	-10	-12	-14	-16	UNIT
Peak Repetitive Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	1200	1400	1600	V
Peak Non_Repetitive Reverse Voltage	V_{RSM}	75	150	275	500	725	900	1100	1300	1500	1700	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	840	980	1120	V

FORWARD CONDUCTION

CHARACTERISTICS	SYMBOL	SBR15	UNIT
Maximum Average Forward Rectified Current @TC=100℃	I_O	15	A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I_{FSM}	300	A
Forward Voltage (per element) @TJ=25℃,@IFM=40APK per single junction	V_F	1.4	V
Peak Reverse Current (per leg) @TJ=25℃ At Rated DC Blocking Voltage @TJ=125℃	I_R	10 5.0	uA mA
RMS Isolation Voltage from Case to Lead	V_{ISO}	2500	V

THERMAL CHARACTERISTICS

Operating Temperature Range	T_J	-55 to +150	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃
Thermal Resistance Junction to Case at DC Operation per Bridge	$R_{\theta JC}$	1.6	K/W
Thermal Resistance Case to Heatsink Mounting Surface, Smooth, Flat and Greased	$R_{\theta CS}$	0.2	K/W

FIG.1-MAXIMUM FORWARD SURGE CURRENT

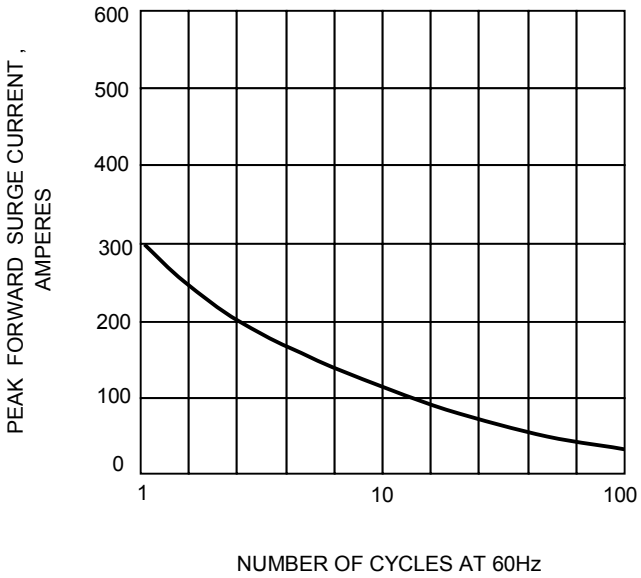


FIG.2- DERATING CURVE
OUTPUT RECTIFIED CURRENT

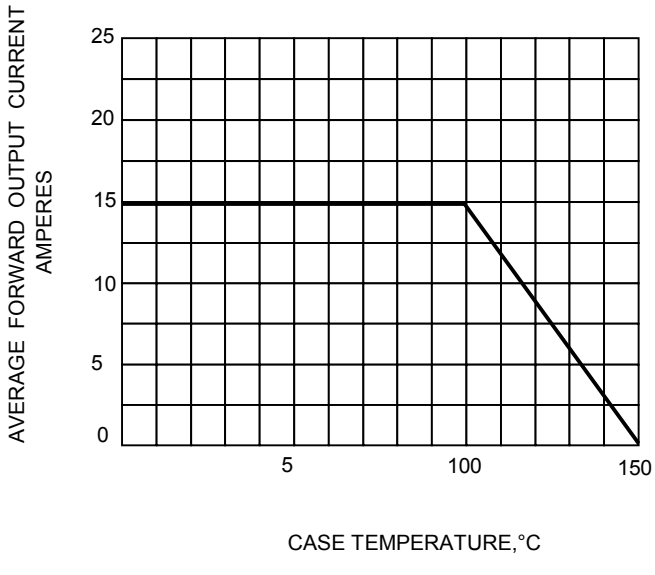


FIG.3-TYPICAL FORWARD
CHARACTERISTICS

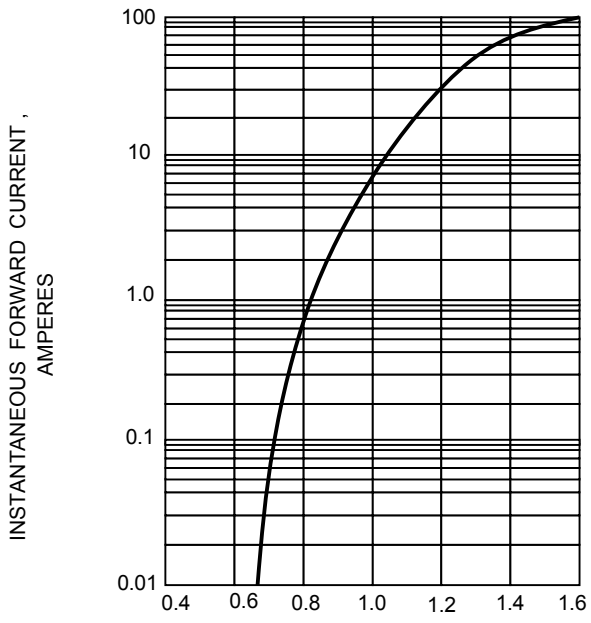


FIG.4-TYPICAL REVERSE
CHARACTERISTICS