

## Glass Passivated 3 Phase Bridge Rectifiers

Reverse Voltage - 50 to 1600Volts

Forward Current - 25 Amperes

### Features

- Low forward voltage drop
- High current capability
- High reliability

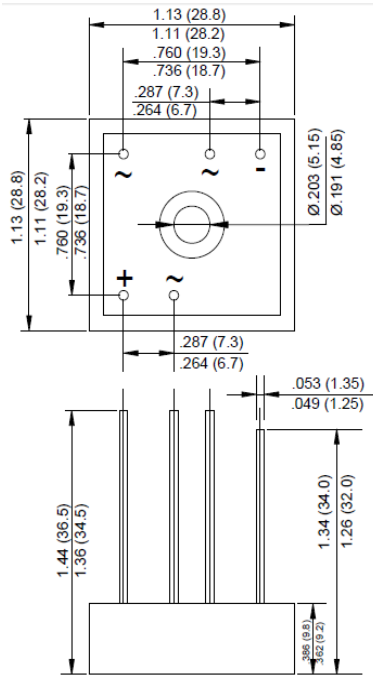
### Mechanical Data

- Case: Epoxy case with heat sink
- Polarity: Symbol marked on body
- Mounting position:
- Bolt pass through the mounting hole of body then fixto heat sink
- Mounting torque: 2 N.m

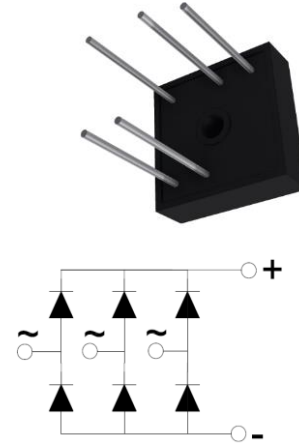
### Applications

- For use in high power supply inverters,servo motor and welding machine applications

### SBR-W



RoHS COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	SBR25										Unit
		00GW	01GW	02GW	04GW	06GW	08GW	10GW	12GW	14GW	16GW	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1200	1400	1600	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	840	980	1120	V
Maximum DC Blocking Voltage	$V_{DC}$	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
Maximum Average Forward Rectified Current @ $T_c=55^\circ C$	$I_{(AV)}$	25										A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	400										A
$I^2t$ Rating for Fusing ( $t < 8.3mS$ )	$I^2t$	664										$A^2 S$
Peak Forward Voltage per Diode at 12.5A DC	$V_F$	1.1										V
Maximum DC Reverse Current at Rated @ $T_J=25^\circ C$	$I_R$	5										$\mu A$
DC Blocking Voltage per Diode @ $T_J=150^\circ C$		3										mA
RMS Isolation Voltage from Case to Lead	$V_{ISO}$	2500										V
Typical Thermal Resistance Junction to Case per Diode	$R_{\theta JC}$	0.9										$^\circ C/W$
Operating Junction Temperature Range	$T_J$	-40 to +150										$^\circ C$
Storage Temperature Range	$T_{STG}$	-40 to +125										$^\circ C$

Note: The typical data above is for reference only

Fig. 1 - Forward Current Derating Curve

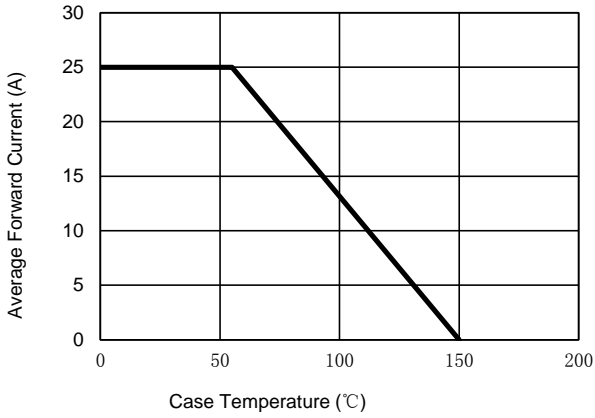


Fig. 2 - Maximum Non-Repetitive Surge Current

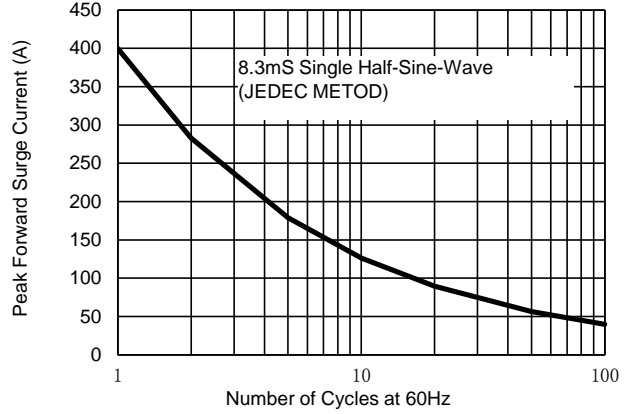


Fig. 3 - Typical Reverse Characteristics

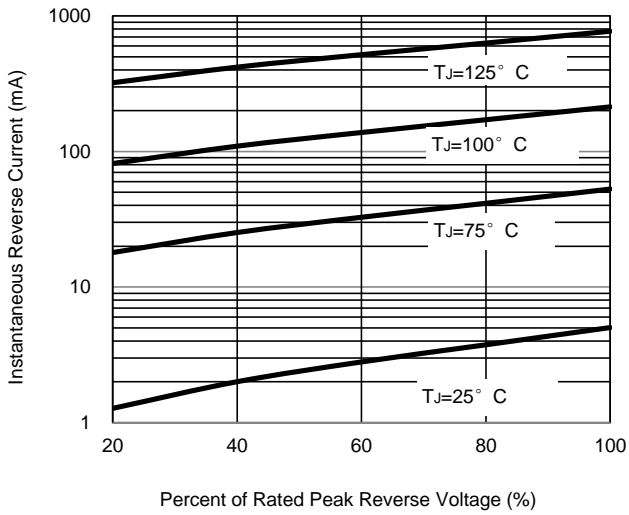
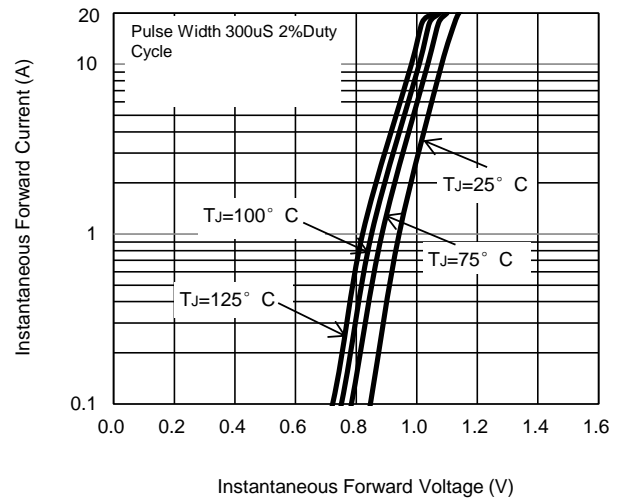


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



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