Single Phase Glass Passivated Silicon Bridge Rectifier

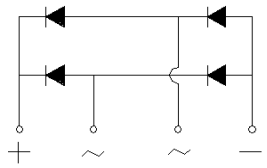
V_{RRM} = 600 V - 1000 V

I_O = 3 A

Features

- Low forward voltage
- High surge overload rating
- Ideal for printed circuit boards
- High temperature soldering: 260ºC/ 10 s
- Types from 600 V up to 1000 V V_{RRM}
- Not ESD Sensitive

BR-3 Package





Applications

- Switching power supply
- Home appliances, office devices
- Industrial auto-equipments

Maximum ratings at T_A = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	BR36	BR38	BR310	Unit
Repetitive peak reverse voltage	V_{RRM}		600	800	1000	V
RMS reverse voltage	V_{RMS}		420	560	700	V
DC blocking voltage	V_{DC}		600	800	1000	V
Operating temperature	T_j		-40 to 125	-40 to 125	-40 to 125	°C
Storage temperature	T_{stg}		-40 to 150	-40 to 150	-40 to 150	°C

Electrical characteristics at T_A = 25 °C, unless otherwise specified

Single phase, half sine wave, 50 Hz, resistive load

For capacitive load derate current by 20%

Parameter	Symbol	Conditions	BR36	BR38	BR310	Unit
Maximum forward rectified current	I_O	T_C = 40 °C	3	3	3	A
Peak forward surge current	I_{FSM}	t_p = 8.3 ms	60	60	60	A
Maximum forward voltage drop	V_F	I_F = 1.5 A	1.05	1.05	1.05	V
Maximum reverse current at rated DC blocking voltage	I_R	T_A = 25 °C	10	10	10	µA
		T_A = 125 °C	500	500	500	
Rating for fusing	I^2t	1 ms < t_p < 10 ms, T_j = 25 °C	15	15	15	A^2s
Thermal resistance	$R_{\Theta JA}$		18	18	18	°C/W
Mounting Torque	M		2.0 (1.0 N.m is recommended)			N.m

Fig.1: Current Derating Curve

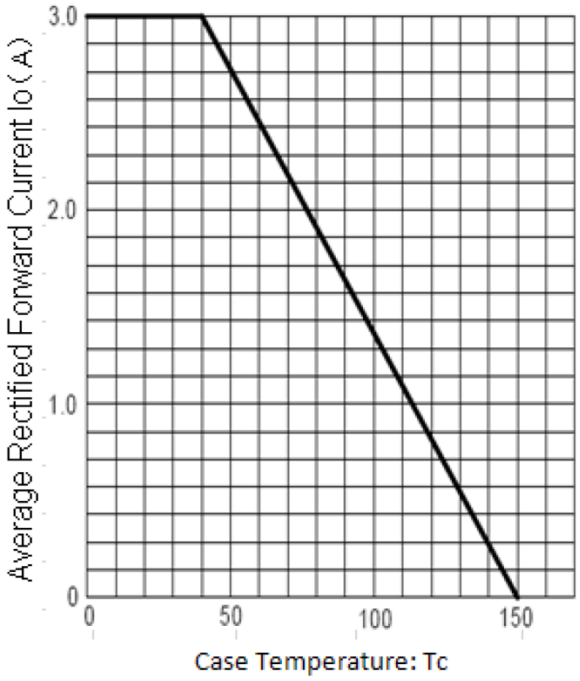


Fig.2: Typical Reverse Characteristics

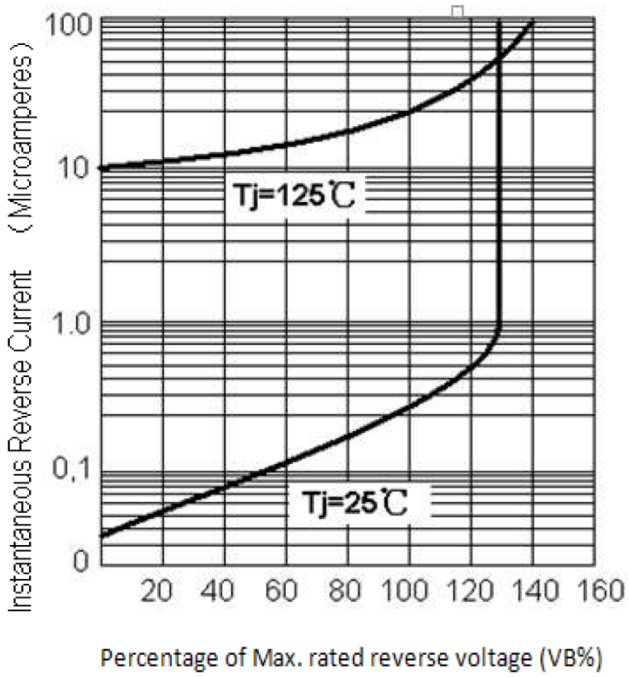


Fig.3: Max. Surge Current

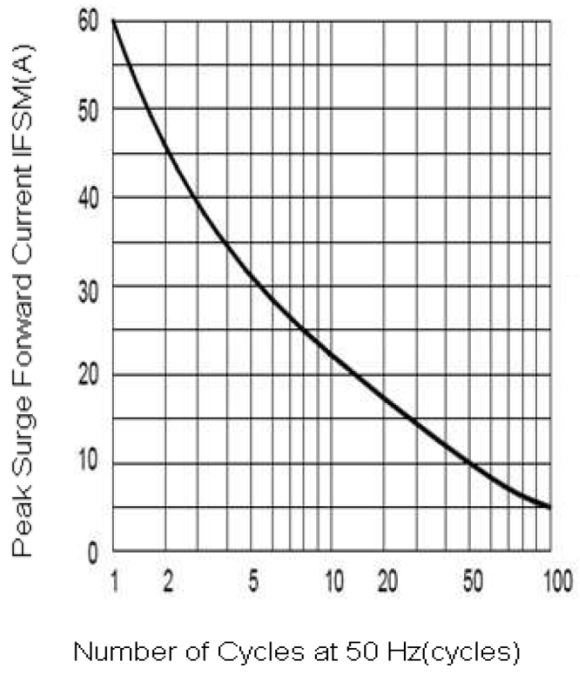
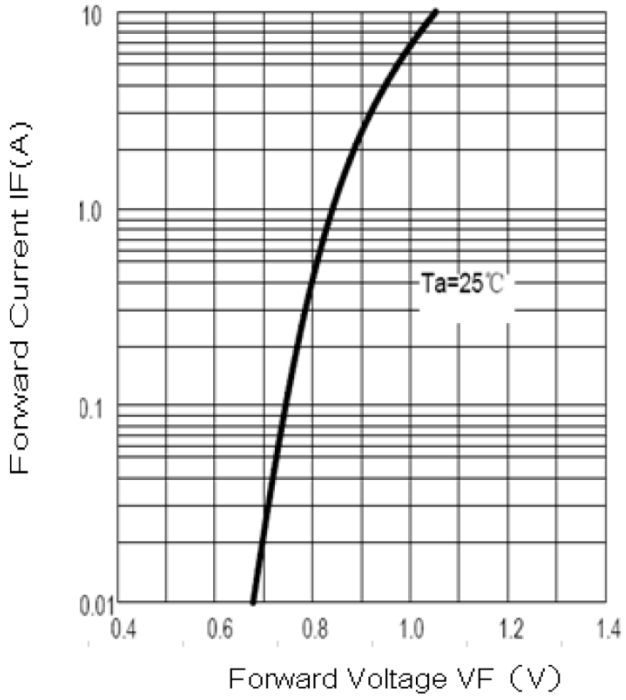


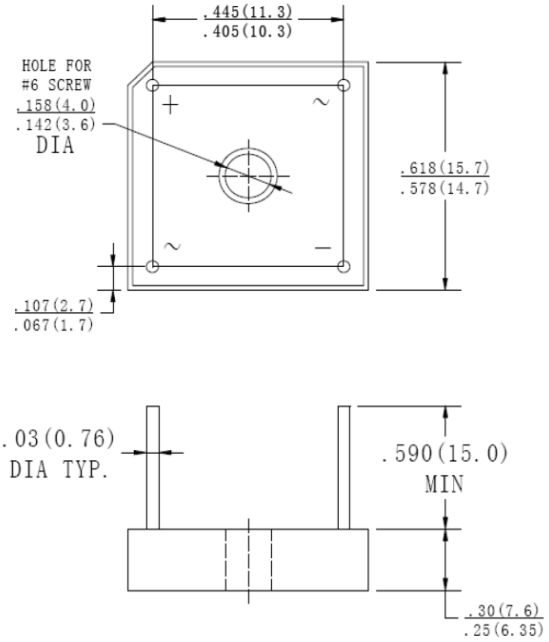
Fig.4: Rated Forward Features



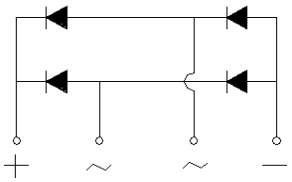
Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

BR-3



Dimensions in inches and (millimeters)



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BR36