

Single Phase Glass Passivated Silicon Bridge Rectifier

$V_{RRM} = 600 \text{ V} - 1000 \text{ V}$

$I_O = 6 \text{ A}$

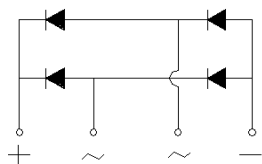
Features

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

Applications

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

BR-6 Package



Maximum ratings at $T_A = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	BR66	BR68	BR610	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 150	-40 to 150	-40 to 150	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to 150	-40 to 150	-40 to 150	$^\circ\text{C}$

Electrical characteristics at $T_A = 25^\circ\text{C}$, unless otherwise specified

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

For capacitive load derate current by 20%

Parameter	Symbol	Conditions	BR66	BR68	BR610	Unit
Maximum forward rectified current	I_O	$T_C = 40^\circ\text{C}$	6	6	6	A
Peak forward surge current	I_{FSM}	$t_p = 8.3 \text{ ms}$	150	150	150	A
Maximum forward voltage drop	V_F	$I_F = 3 \text{ A}$	1.05	1.05	1.05	V
Maximum reverse current at rated DC blocking voltage	I_R	$T_A = 25^\circ\text{C}$	10	10	10	μA
		$T_A = 125^\circ\text{C}$	500	500	500	
Rating for fusing	I^2t	$1 \text{ ms} < t_p < 10 \text{ ms},$ $T_j = 25^\circ\text{C}$	93	93	93	A^2s
Thermal resistance	$R_{\theta JA}$		9	9	9	$^\circ\text{C/W}$

Fig.1 Current Derating Curve

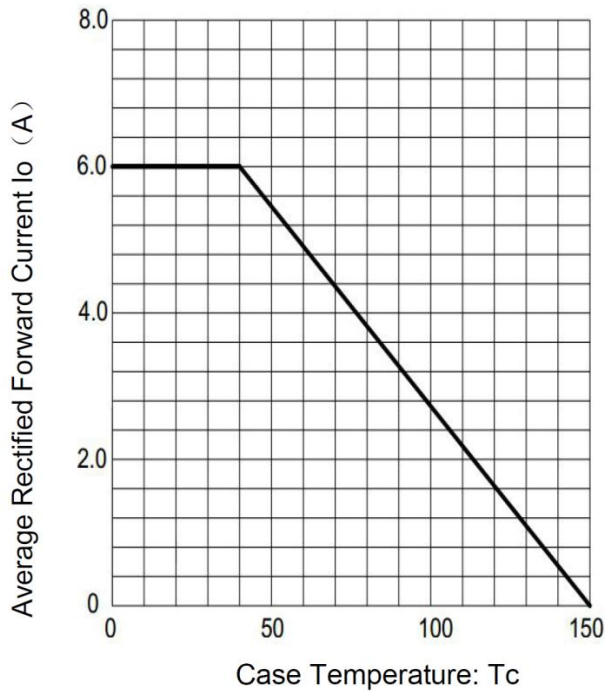


Fig.2 Typical Reverse Characteristics

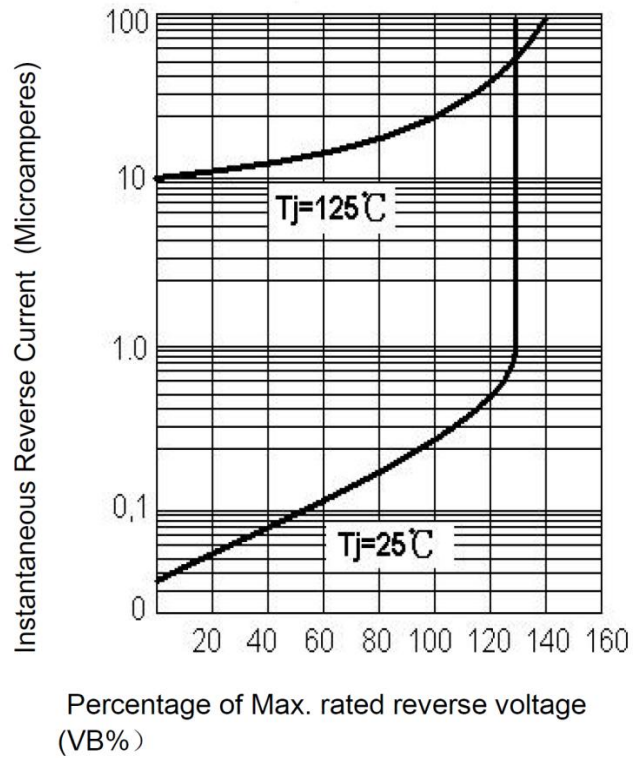


Fig.3 Max. Surge Current

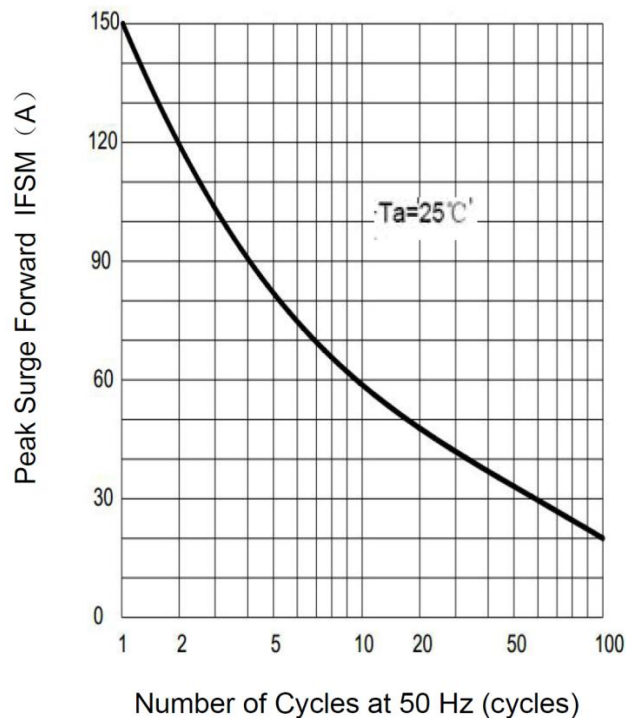
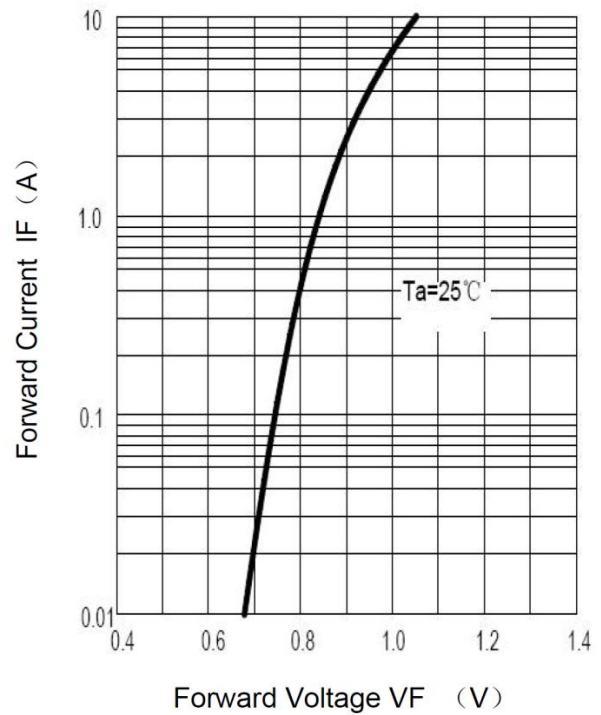


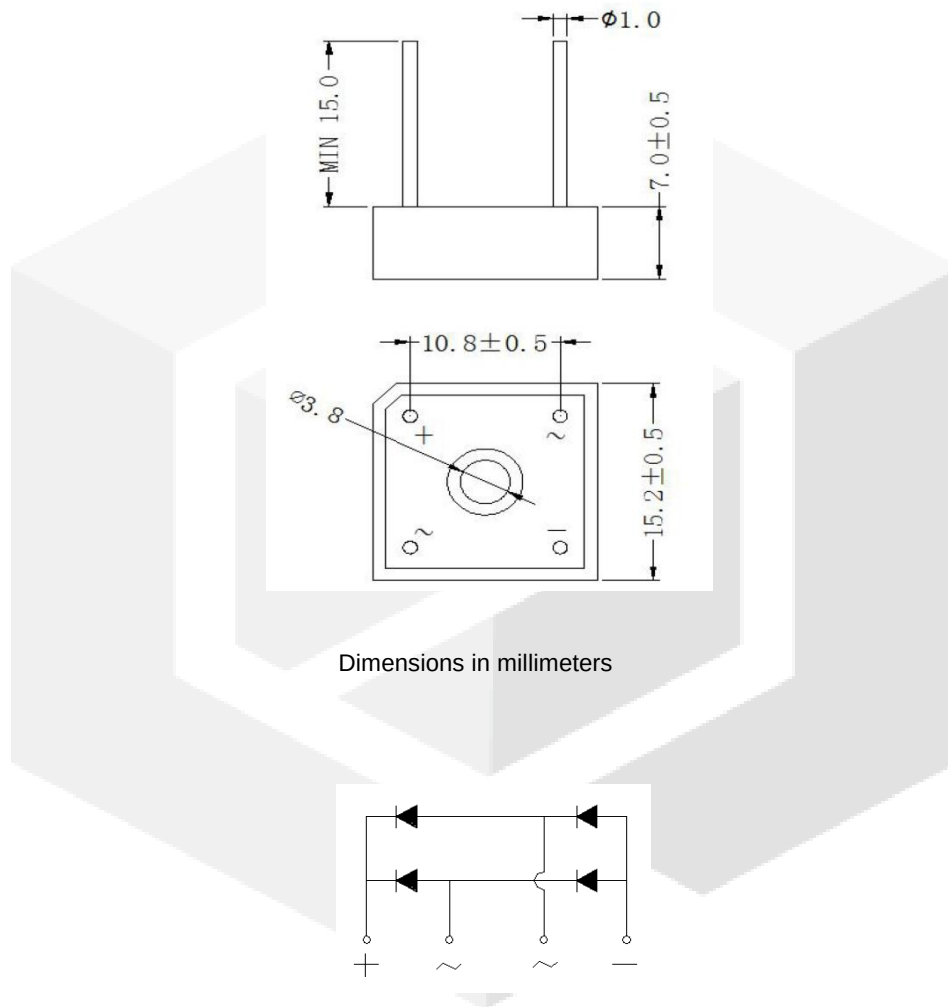
Fig.4 Rated Forward Features



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

BR-6



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