

Single Phase Silicon Bridge Rectifier

 $V_{RRM} = 50\text{ V} - 400\text{ V}$
 $I_O = 8\text{ A}$

Features

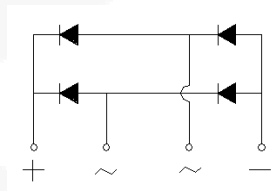
- Low forward voltage drop
- Low leakage current
- Types from 50 V up to 400 V V_{RRM}
- Not ESD Sensitive

Mechanical Data

Mounting: Hole thru for #6 screw

Mounting position: Any

BR-8 Package



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

Parameter	Symbol	Conditions	BR805	BR81	BR82	BR84	Unit
Repetitive peak reverse voltage	V_{RRM}		50	100	200	400	V
RMS reverse voltage	V_{RMS}		35	70	140	280	V
DC blocking voltage	V_{DC}		50	100	200	400	V
Operating temperature	T_j		-65 to 125	-65 to 125	-65 to 125	-65 to 125	$^{\circ}\text{C}$
Storage temperature	T_{stg}		-65 to 150	-65 to 150	-65 to 150	-65 to 150	$^{\circ}\text{C}$

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

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

For capacitive load derate current by 20%

Parameter	Symbol	Conditions	BR805	BR81	BR82	BR84	Unit
Maximum average forward rectified current	I_O	$T_c = 50\text{ }^{\circ}\text{C}$	8.0	8.0	8.0	8.0	A
Peak forward surge current	I_{FSM}	$t_p = 8.3\text{ ms}$, half sine	250	250	250	250	A
Maximum instantaneous forward voltage drop per bridge element	V_F	$I_F = 4.0\text{ A}$	1.1	1.1	1.1	1.1	V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_a = 25\text{ }^{\circ}\text{C}$	10	10	10	10	μA
		$T_a = 100\text{ }^{\circ}\text{C}$	200	200	200	200	

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

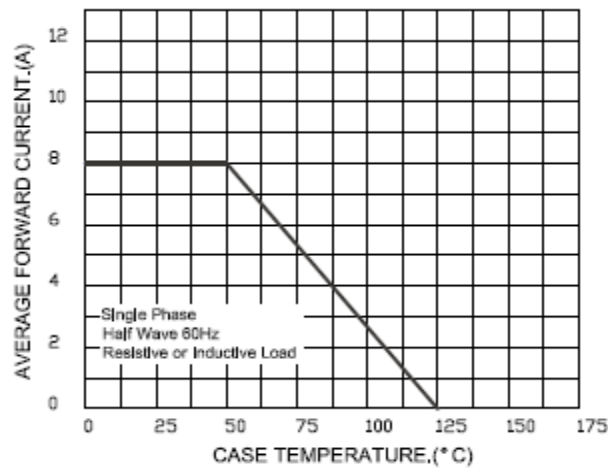


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

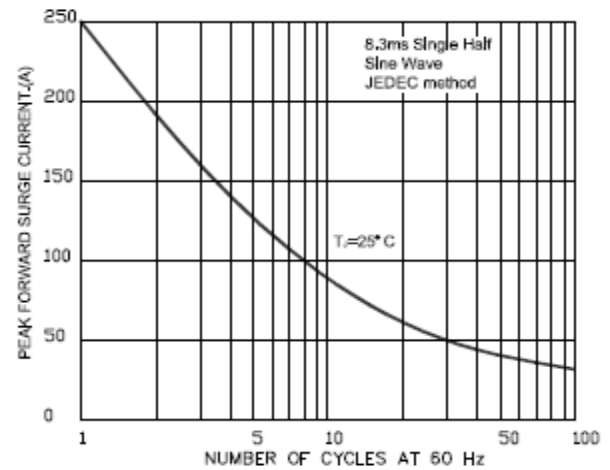


FIG.3-TYPICAL FORWARD CHARACTERISTICS

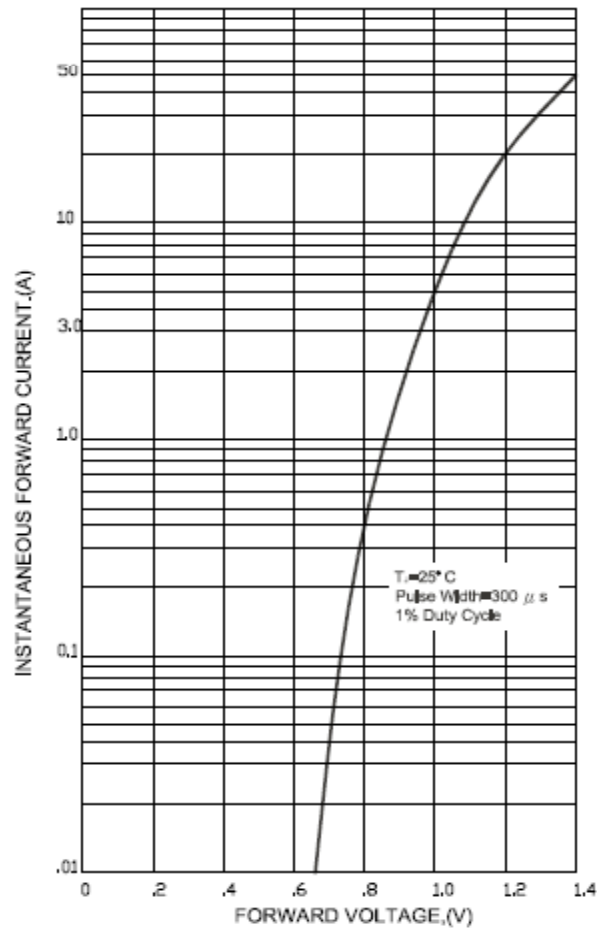
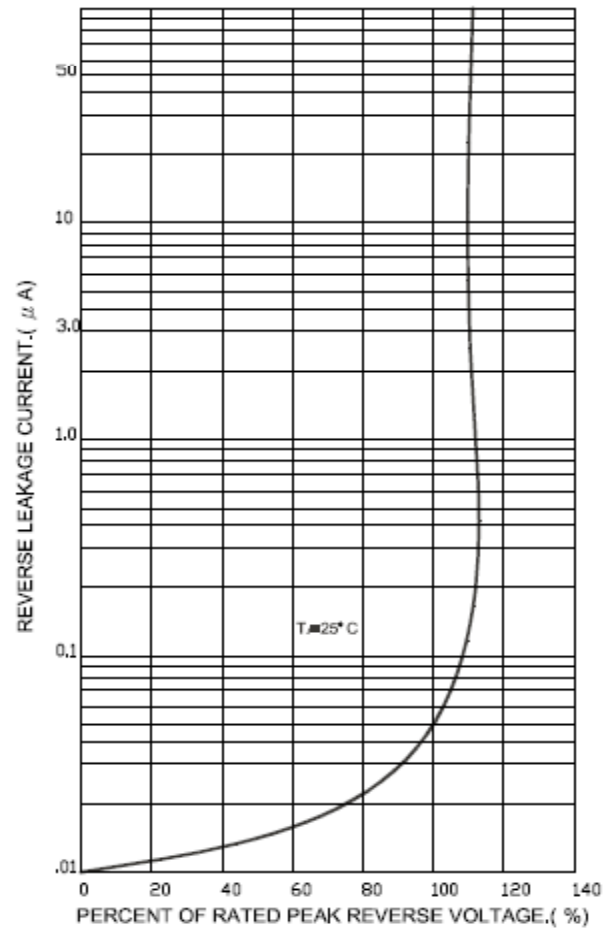
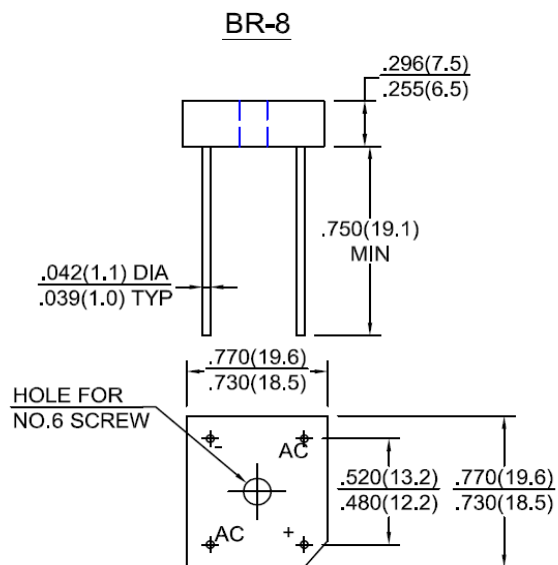


FIG.4-TYPICAL REVERSE CHARACTERISTICS

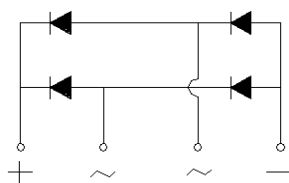


Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



Dimensions in inches and (millimeters)



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[GeneSiC Semiconductor:](#)

[BR805](#) [BR81](#) [BR82](#) [BR84](#)