

Single Phase Silicon Bridge Rectifier

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

$I_O = 8 \text{ A}$

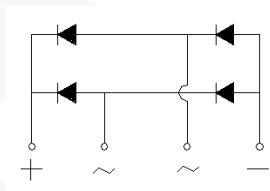
Features

- 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 $T_c = 25^\circ\text{C}$, 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 $T_c = 25^\circ\text{C}$, 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	$T_c = 50^\circ\text{C}$	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	$T_a = 25^\circ\text{C}$	10	10	10	10	μA
		$T_a = 100^\circ\text{C}$	200	200	200	200	

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

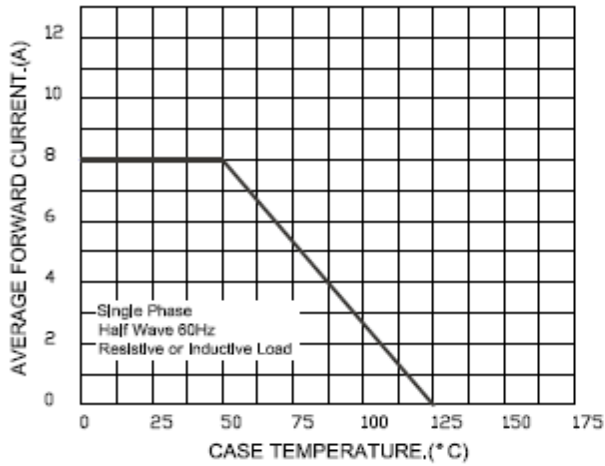


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

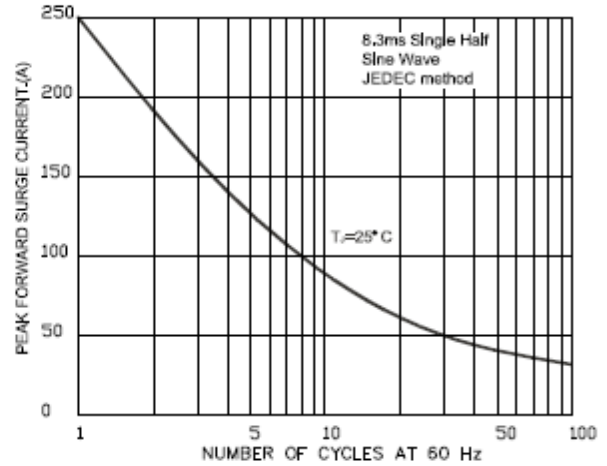


FIG.3-TYPICAL FORWARD CHARACTERISTICS

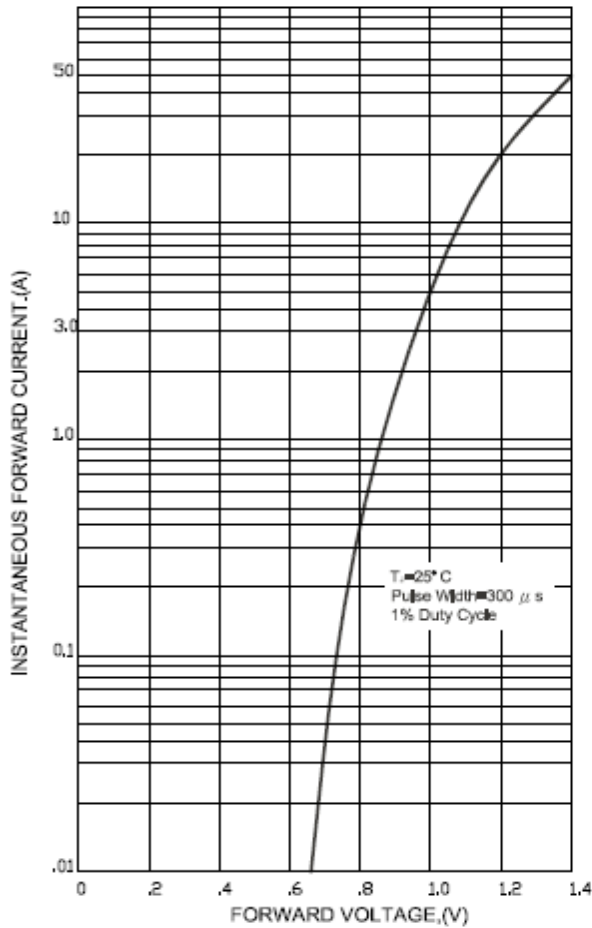
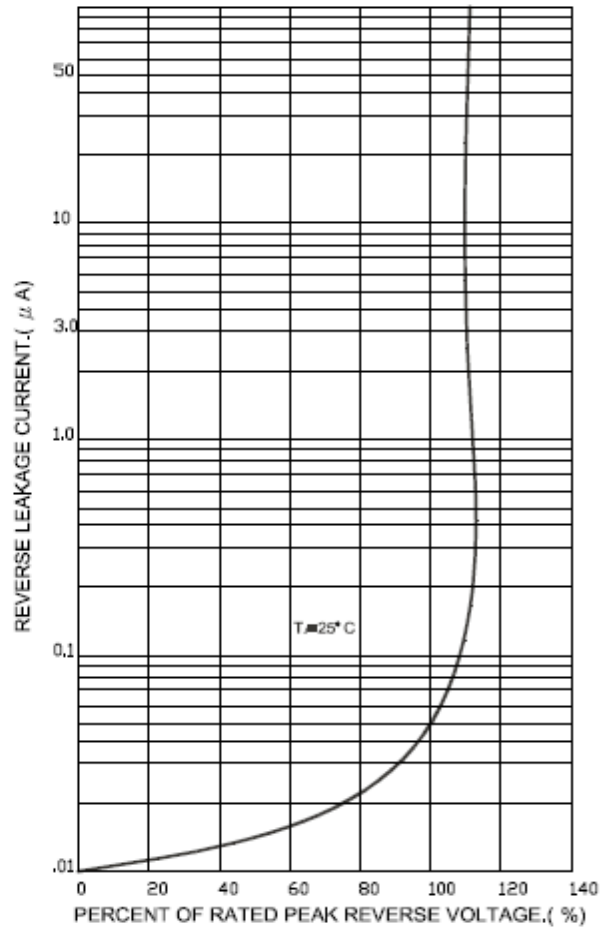
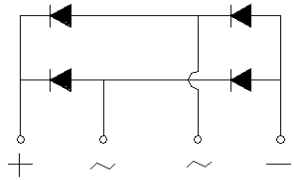
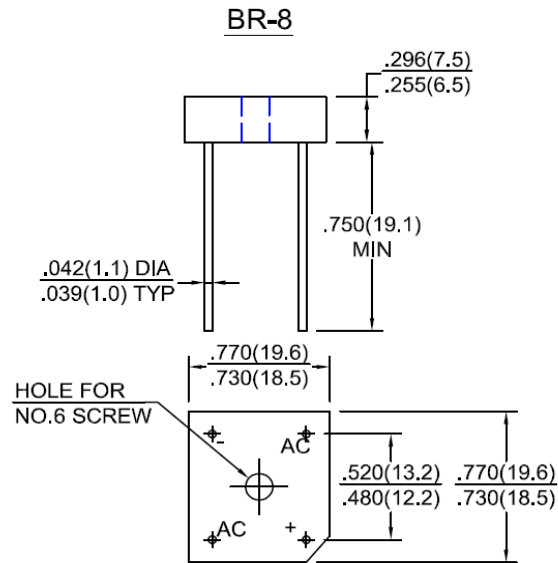


FIG.4-TYPICAL REVERSE CHARACTERISTICS



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



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