

Single Phase Silicon Bridge Rectifier

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

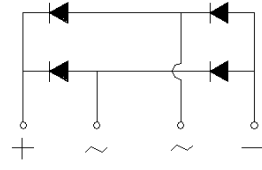
$I_O = 3 \text{ A}$

Features

- Ideal for printed circuit board
- Low forward voltage drop
- Low leakage current
- Types from 600 V up to 1000 V V_{RRM}
- Not ESD Sensitive

Mechanical Data

Case: Molded plastic body
Mounting: Hole thru for #6 screw
Mounting position: Any
Lead: As marked



BR-3 Package



Maximum ratings at $T_c = 25^\circ\text{C}$, 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		-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	$^\circ\text{C}$

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	BR36	BR38	BR310	Unit
Maximum average forward rectified current	I_O	$T_c = 50^\circ\text{C}$	3.0	3.0	3.0	A
Peak forward surge current	I_{FSM}	$t_p = 8.3 \text{ ms}$, half sine	50	50	50	A
Maximum instantaneous forward voltage drop per bridge element	V_F	$I_F = 1.5 \text{ A}$	1.0	1.0	1.0	V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_c = 25^\circ\text{C}$	10	10	10	μA
		$T_c = 100^\circ\text{C}$	100	100	100	

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

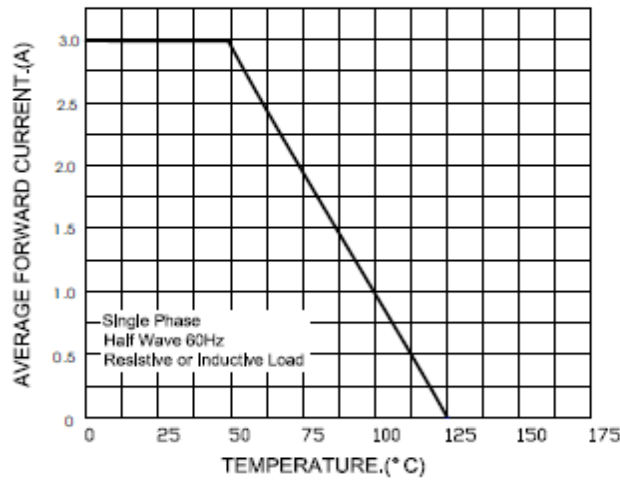


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

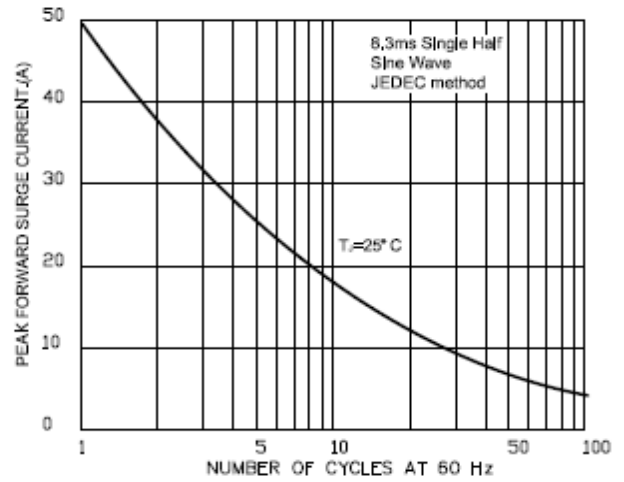


FIG.3-TYPICAL FORWARD CHARACTERISTICS

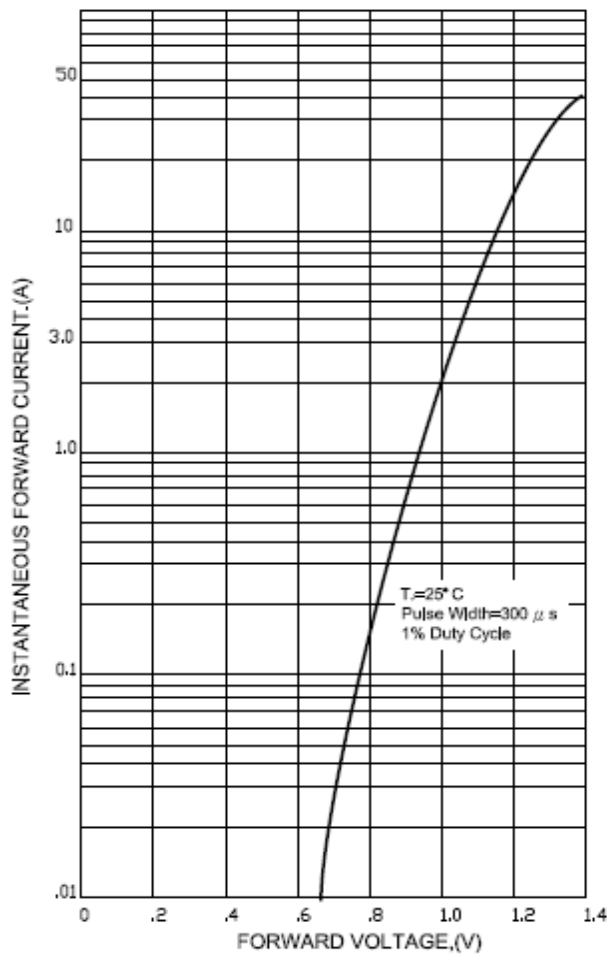
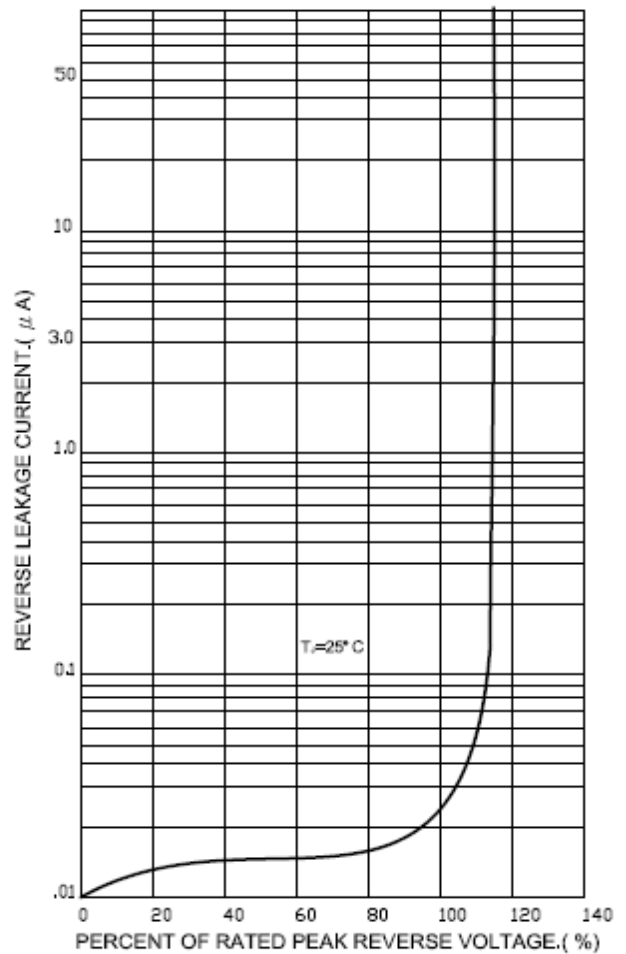
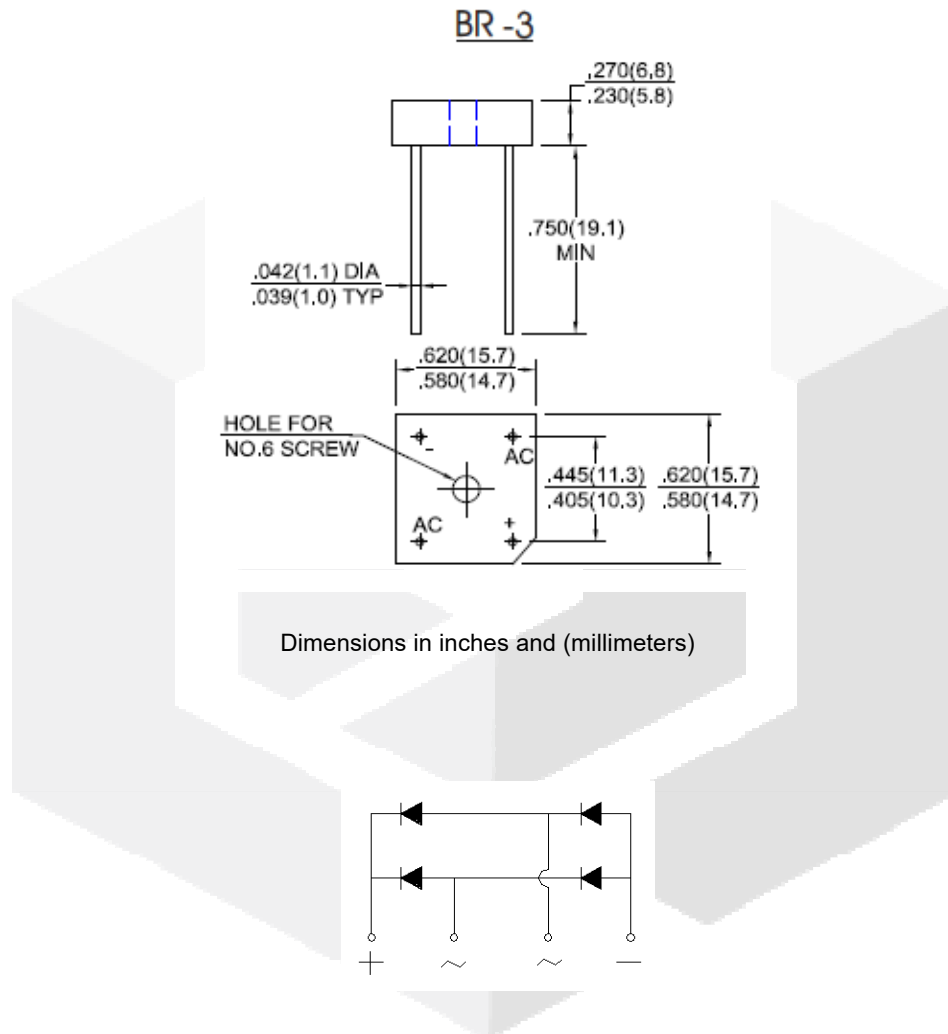


FIG.4-TYPICAL REVERSE CHARACTERISTICS



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



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