

Single Phase Silicon Bridge Rectifier

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

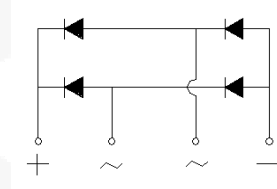
$$I_O = 6 \text{ A}$$

Features

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

Mechanical Data

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



BR-6 Package



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

Parameter	Symbol	Conditions	BR605	BR61	BR62	BR64	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	BR605	BR61	BR62	BR64	Unit
Maximum average forward rectified current	I_O	$T_c = 75 \text{ }^\circ\text{C}$	6.0	6.0	6.0	6.0	A
Peak forward surge current	I_{FSM}	$t_p = 8.3 \text{ ms}$, half sine	200	200	200	200	A
Maximum instantaneous forward voltage drop per bridge element	V_F	$I_F = 3.0 \text{ A}$	1.0	1.0	1.0	1.0	V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_a = 25 \text{ }^\circ\text{C}$ $T_a = 100 \text{ }^\circ\text{C}$	10 200	10 200	10 200	10 200	μA

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

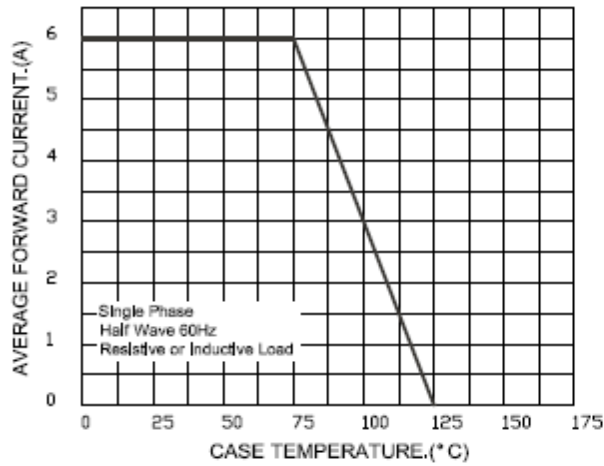


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

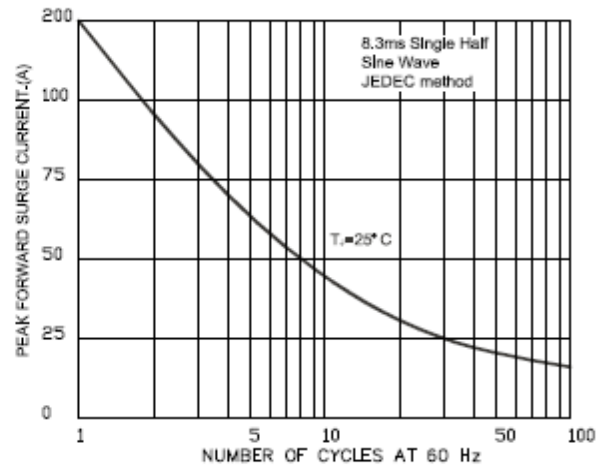


FIG.3-TYPICAL FORWARD CHARACTERISTICS

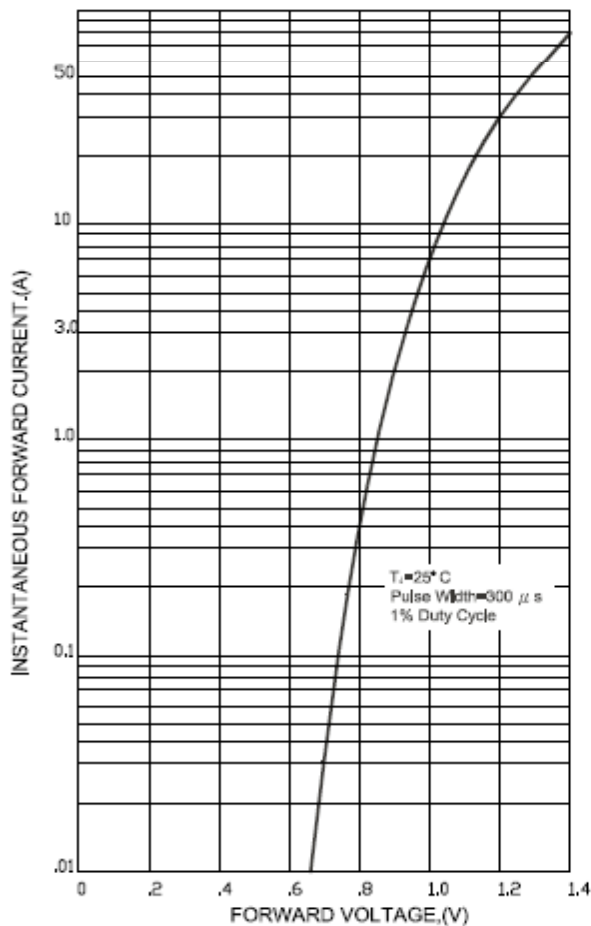
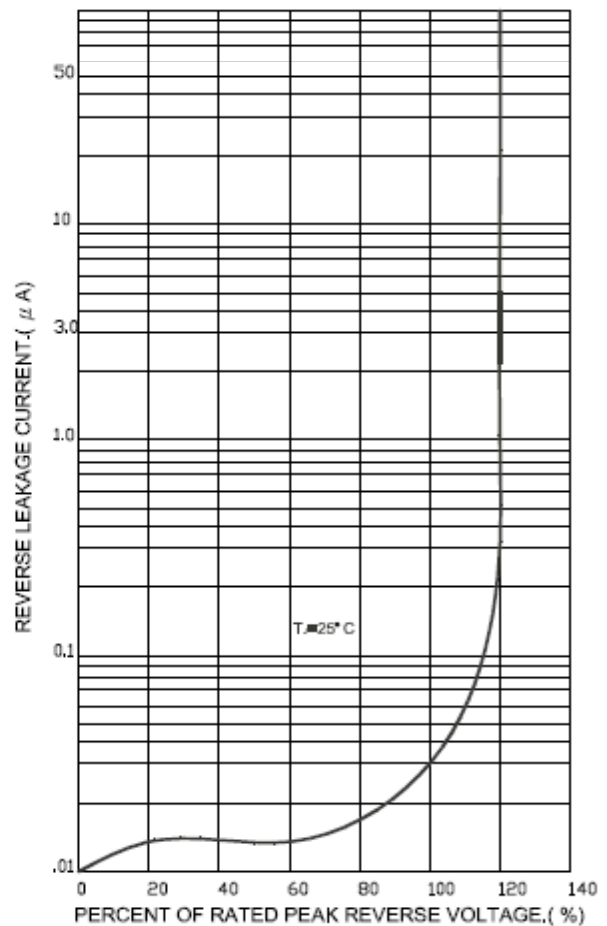


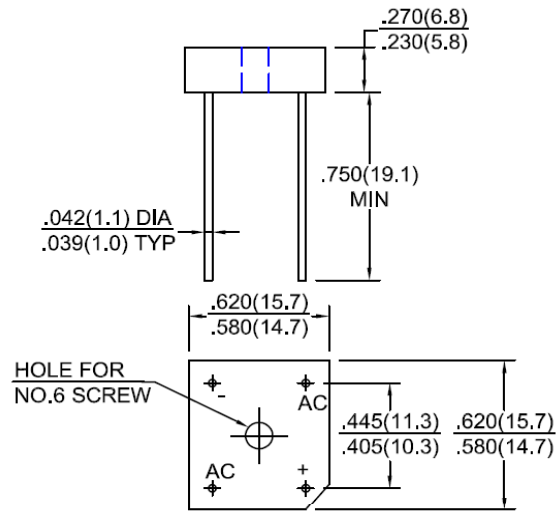
FIG.4-TYPICAL REVERSE CHARACTERISTICS



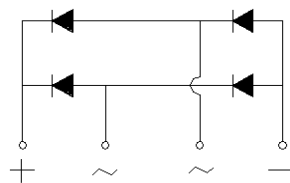
Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

BR-6



Dimensions in inches and (millimeters)



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