

# Single Phase Silicon Bridge Rectifier

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

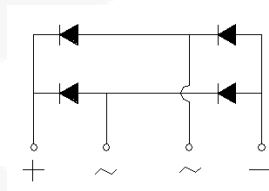
## Features

- 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	$I_R$	$T_a = 25\text{ }^\circ\text{C}$ $T_a = 100\text{ }^\circ\text{C}$	10 200	10 200	10 200	10 200	$\mu\text{A}$

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

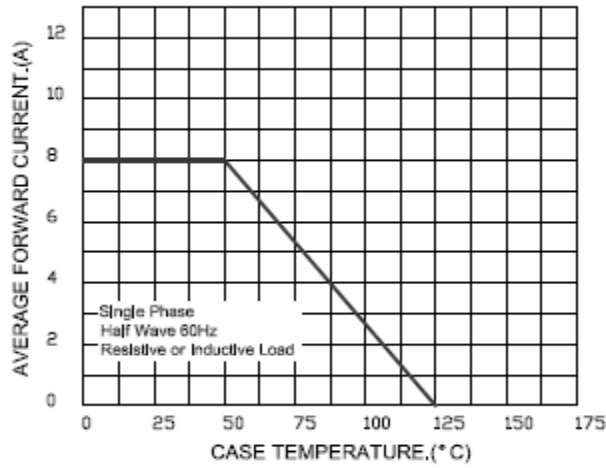


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

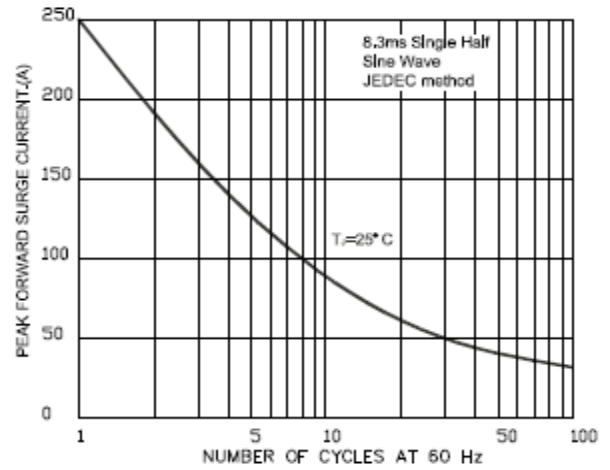


FIG.3-TYPICAL FORWARD CHARACTERISTICS

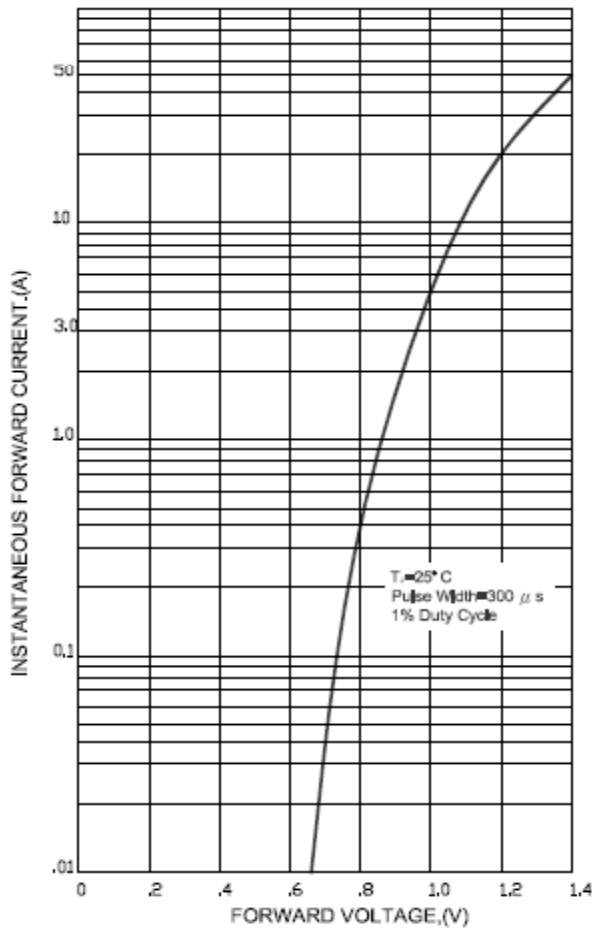
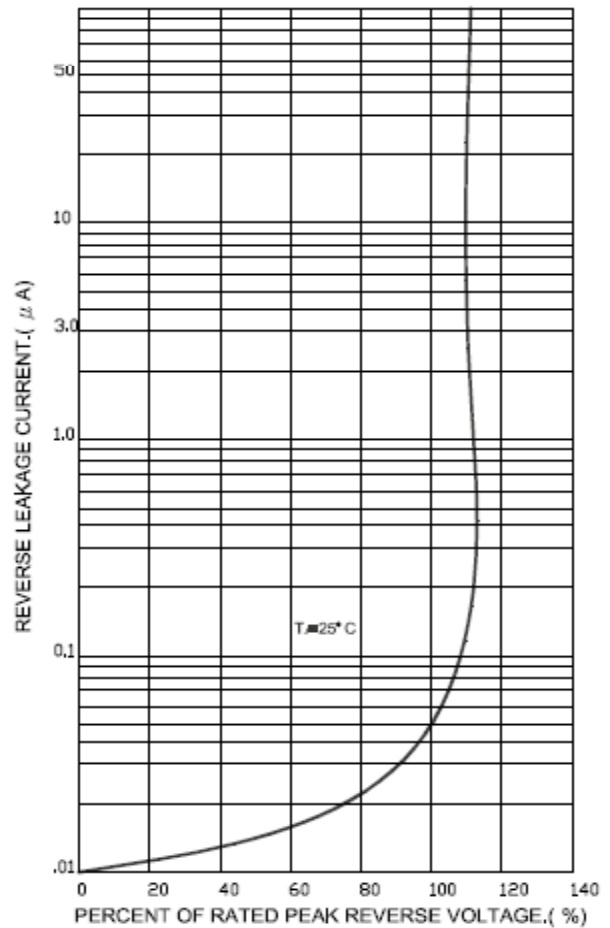


FIG.4-TYPICAL REVERSE CHARACTERISTICS



**Package dimensions and terminal configuration**

Product is marked with part number and terminal configuration.

