

Single Phase Silicon Bridge Rectifier

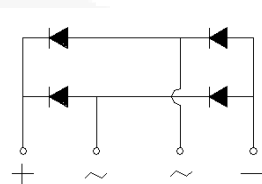
 $V_{RRM} = 50\text{ V} - 400\text{ V}$
 $I_O = 3\text{ A}$

Features

- Ideal for printed circuit board
- 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-3 Package


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

Parameter	Symbol	Conditions	BR305	BR31	BR32	BR34	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	°C
Storage temperature	T_{stg}		-65 to 150	-65 to 150	-65 to 150	-65 to 150	°C

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

Single phase, half sine wave, 60 Hz, resistive or inductive load
 For capacitive load derate current by 20%

Parameter	Symbol	Conditions	BR305	BR31	BR32	BR34	Unit
Maximum average forward rectified current	I_O	$T_c = 50\text{ °C}$	3.0	3.0	3.0	3.0	A
Peak forward surge current	I_{FSM}	$t_p = 8.3\text{ ms}$, half sine	50	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	1.0	V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_c = 25\text{ °C}$ $T_c = 100\text{ °C}$	10 100	10 100	10 100	10 100	μA

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

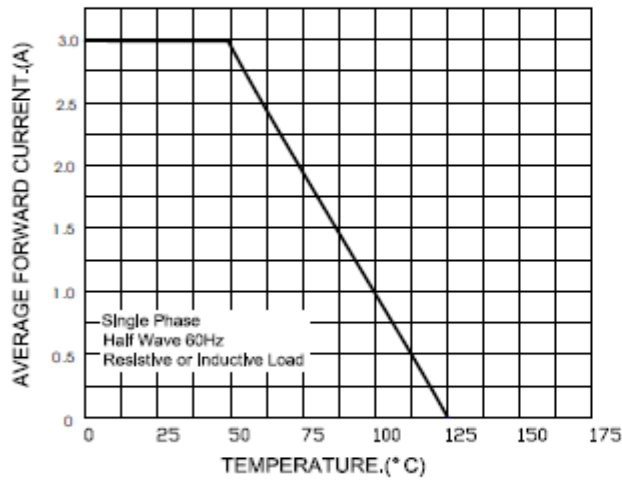


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

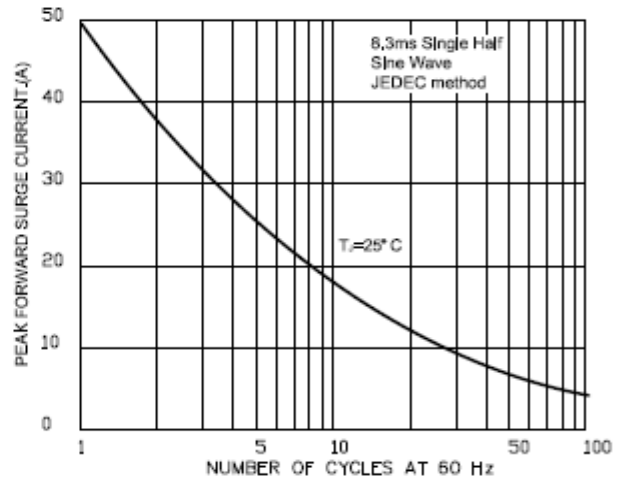


FIG.3-TYPICAL FORWARD CHARACTERISTICS

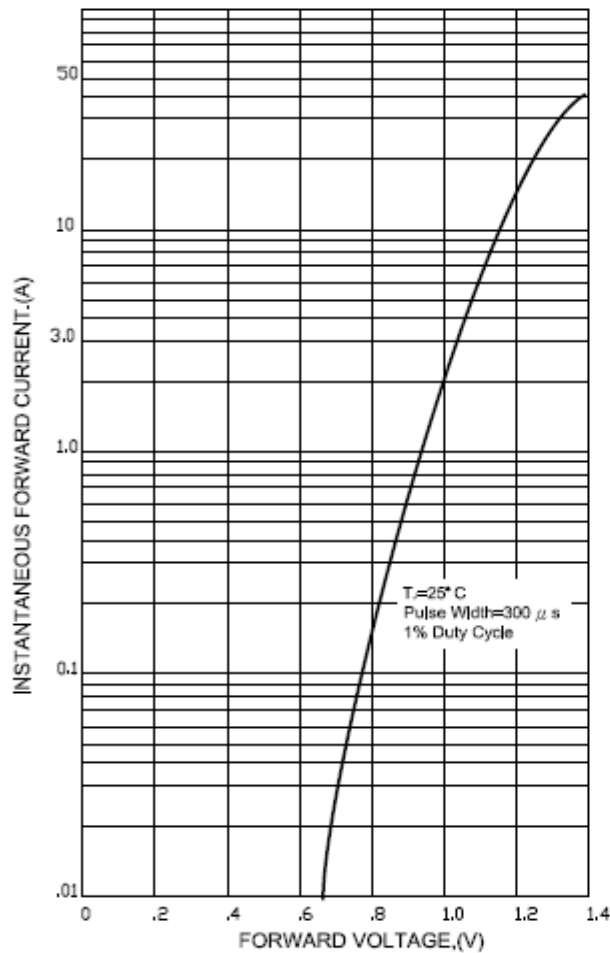
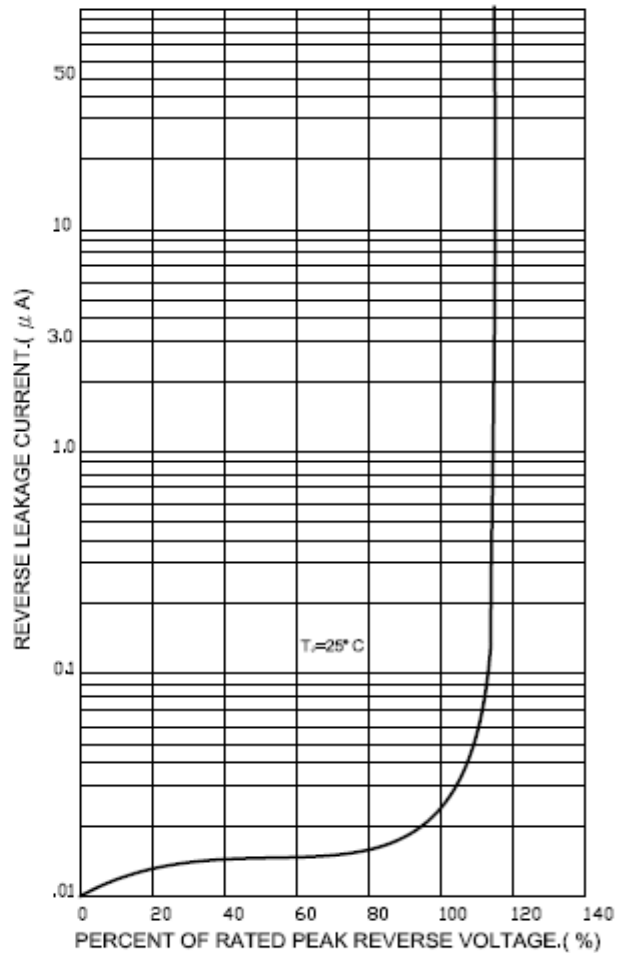


FIG.4-TYPICAL REVERSE CHARACTERISTICS



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

