America Semiconductor

Silicon Bridge Rectifier

BR66 thru BR610

V_{RRM} = 50 V - 1000 V

I_F = 6 A

Features

- Types up to 1000 V V_{RRM}
- Ideal for printed circuit board
- Low forward voltage drop
- High temperature soldering guaranteed: 250^{0}C/ 10 seconds, 0.375" lead length
- Low leakage current

BR-6 Package

Mechanical Data

Case: Molded plastic body
Polarity: Marked on body
Mounting position: Any
Mounting: Hole for number 6 screw

Maximum ratings, at T_j = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	BR66	BR68	BR610	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
Continuous forward current	I_F	$T_C \leq 75$ °C	6	6	6	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	T_C = 25 °C, t_p = 8.3 ms	125	125	125	A
Operating temperature	T_j		-65 to 125	-65 to 125	-65 to 125	°C
Storage temperature	T_{stg}		-65 to 150	-65 to 150	-65 to 150	°C

Electrical characteristics, at Tj = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	BR66	BR68	BR610	Unit
Diode forward voltage	V_F	I_F = 3 A, T_j = 25 °C	1	1	1	V
Reverse current	I_R	V_R = 50 V, T_j = 25 °C V_R = 50 V, T_j = 100 °C	10 200	10 200	10 200	µA

RoHS Compliant

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

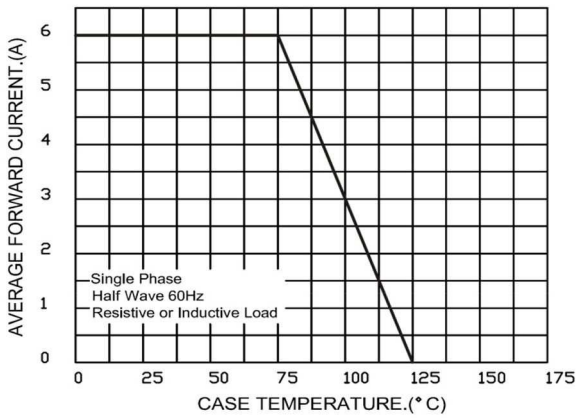

FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

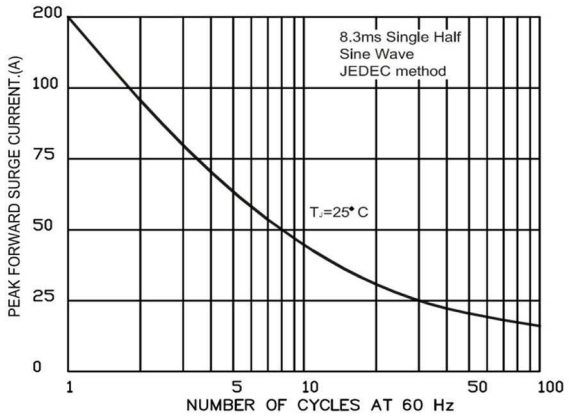

FIG.3-TYPICAL FORWARD CHARACTERISTICS

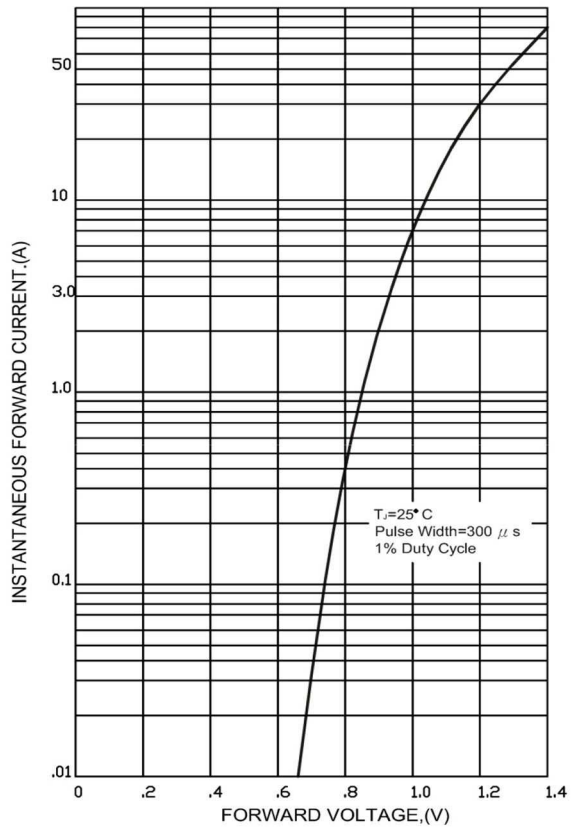

FIG.4-TYPICAL REVERSE CHARACTERISTICS