

# Single-Phase Bridge Rectifier 8.0A BR8 Package

BR8 Series

MERITEK

## FEATURE

- Operating Temperature: -55 ~ +150°C
- Average Forward Rectified Output Current 8.0A
- Repetitive Reverse Voltage from 50~1000V
- Surge Overload Ratings to 125A
- Through Hole Mounting for #6 Screw
- Flammability Classification 94V-0
- UL Safety Approved: Certification No: E223027



## MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

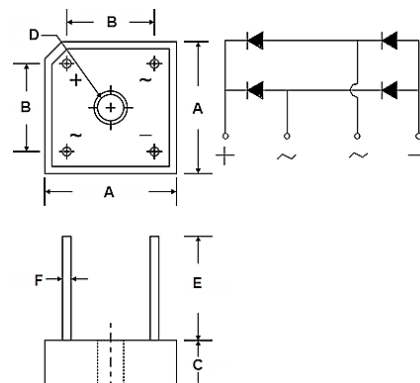


Parameter	Code	BR 805	BR 81	BR 82	BR 84	BR 86	BR 88	BR 810	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current	$I_F$	8.0, $T_C=50^\circ\text{C}$							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated load (JEDEC Method)	$I_{FSM}$	125							A
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	65							$\text{A}^2\text{sec}$
Maximum instantaneous forward voltage drop per Diode	$V_F$	1.1, $I_F=4.0\text{A}$							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element	$I_R$	10, $T_A=25^\circ\text{C}$							$\mu\text{A}$
	$I_R$	1000, $T_A=100^\circ\text{C}$							$\mu\text{A}$
Typical Junction Capacitance per Element	$C_j$	55.0							pF
Operating Junction and Storage Temperature	$T_J, T_{STG}$	-55~150							$^\circ\text{C}$
Typical Thermal Resistance per Element	$R_{\theta JA}$	9.4							$^\circ\text{C/W}$

- Note:**
1. Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz. For Capacitive load derate current by 20%.
  2. Mounted on metal chassis.
  3. Non-repetitive, for  $t > 1\text{ms}$  and  $< 8.3\text{ms}$ .
  4. Measured at 1.0MHz and applied reverse voltage of 4.0 VDC.

## DIMENSION AND PIN CONFIGURATION

Item	Min. (mm)	Max. (mm)
A	18.45	19.55
B	12.2	13.2
C	6.50	7.50
D	DIA. 3.30	DIA. 4.30
E	15.0	-
F	1.20	1.30



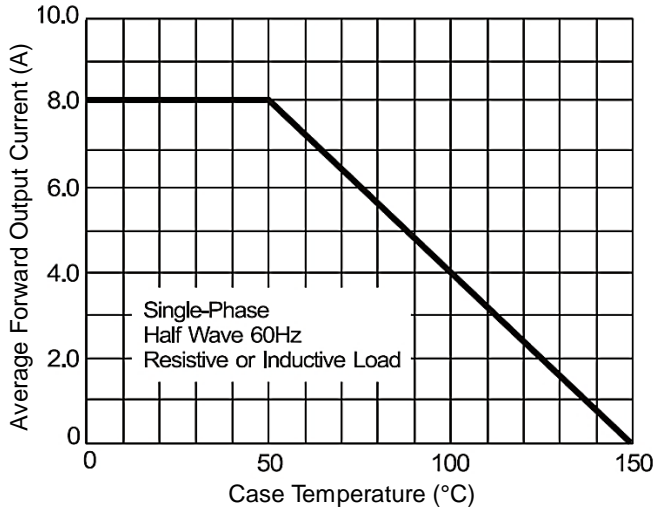
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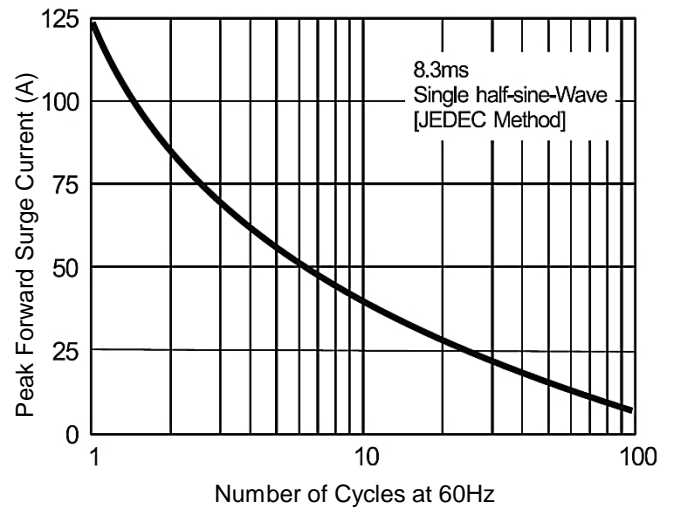
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## RATING AND CHARACTERISTIC CURVES

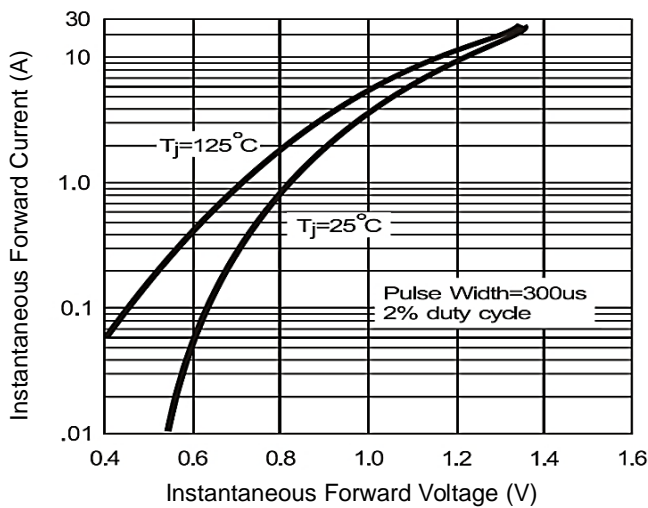
Derating Curve for Output Rectified Current



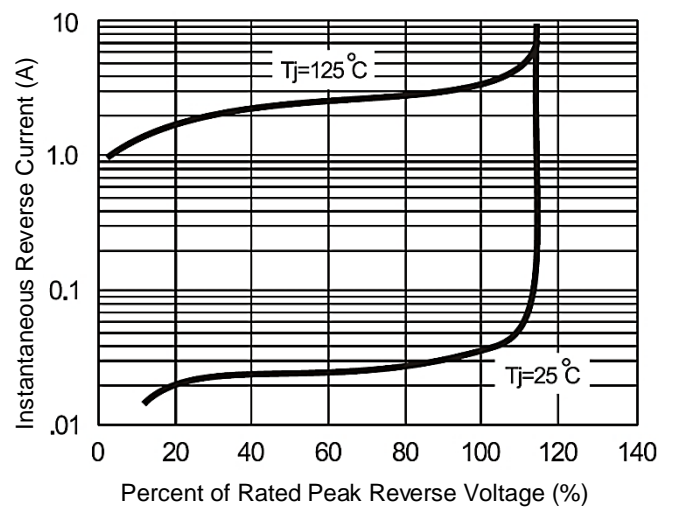
Maximum Non-Repetitive Peak Forward Surge Current



Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



\*Specifications subject to change without notice.