

BR508

HIGH CURRENT SINGLE-PHASE SILICON BRIDGE RECTIFIER



康比電子
HORNBY ELECTRONIC

REVERSE VOLTAGE: 800 VOLTS
FORWARD CURRENT: 50.0 AMPERE

FEATURES

- Electrically Isolated Metal Case for Maximum Heat Dissipation
- Surge Overload Ratings to 500 Amperes
- Low power loss, high efficiency
- Low reverse leakage current
- Case to terminal isolation voltage 2500V
- UL Recognized File # E-216968

MECHANICAL DATA

Case: Metal or molded plastic with heatsink integrally mounted in the bridge encapsulation

Suffix letter "P" added to indicate plastic

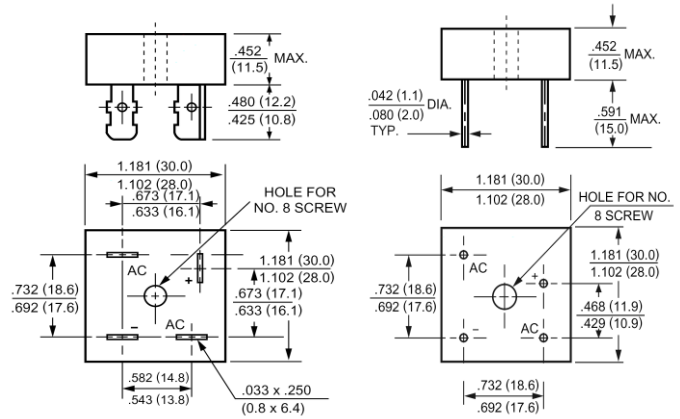
Terminals: Either plated 0.25" (6.35mm) Fasten lugs or plated copper leads 0.040" (1.02mm) diameter.

Suffix letter "W" added to indicate leads

Mounting position: Any

Weight: 1.0ounce, 30.0gram

KBPC(W)



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols						KBPC5008		Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}						800		Volts
Maximum RMS Voltage	V_{RMS}						560		Volts
Maximum DC Blocking Voltage	V_{DC}						800		Volts
Maximum Average Forward Rectified Current at $T_C=55$	$I_{(AV)}$						50.0		Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}						400		Amp
Maximum Forward Voltage at 25.0A DC and 25	V_F						1.1		Volts
Maximum Reverse Current at $T_A=25$ at Rated DC Blocking Voltage $T_A=125$	I_R						10.0 1000		uAmp
Typical Junction Capacitance (Note 1)	C_J						300		pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$						2.6		/W
Operating and Storage Temperature Range	T_J, T_{stg}						-55 to +150		

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal resistance from junction to case per leg

RATINGS AND CHARACTERISTIC CURVES

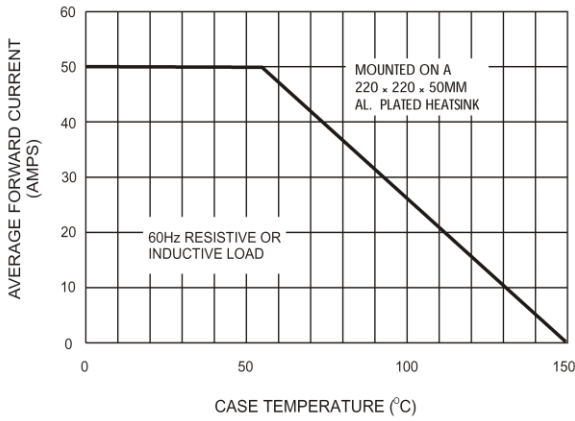


Figure 1. Forward Current Derating Curve

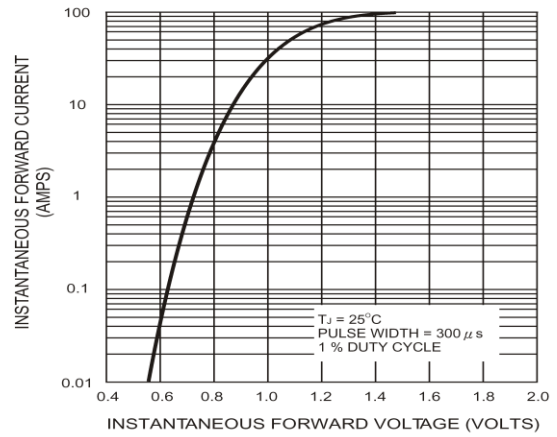


Figure 2. Typical Instantaneous Forward Characteristics Per Bridge Element

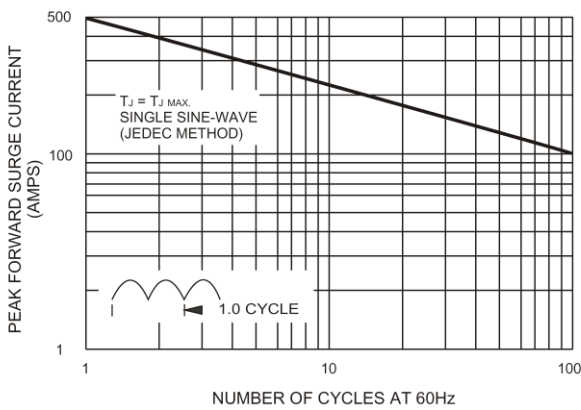


Figure 3. Maximum Non-repetitive Peak Forward Surge Current Per Bridge Element

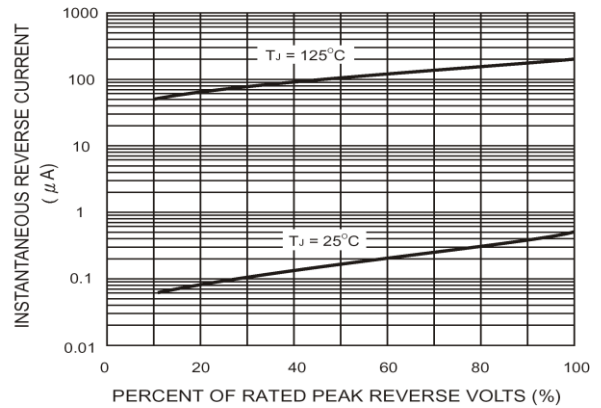


Figure 4. Typical Reverse Leakage Characteristics Per Bridge Element

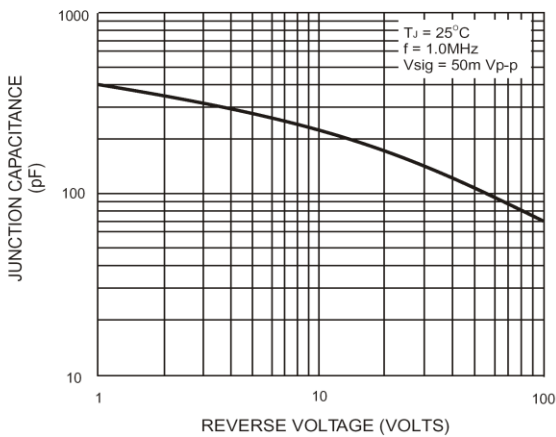


Figure 5. Typical Junction Capacitance Per Bridge Element

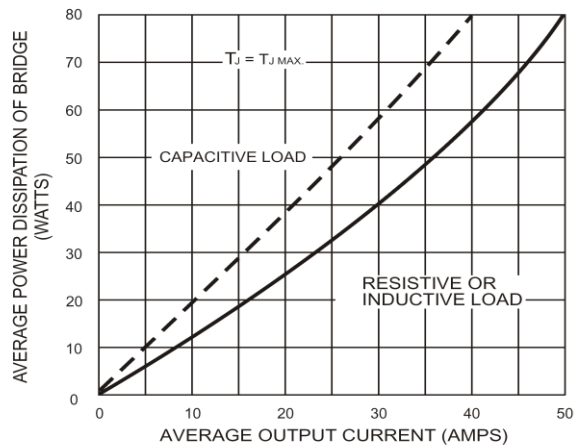


Figure 6. Maximum Power Dissipation