KBPC35005(W) THRU KBPC3510(W)



HIGH CURRENT SINGLE-PHASE SILICON BRIDGE RECTIFIER

REVERSE VOLTAGE: FORWARD CURRENT:

50 to 1000 VOLTS 35.0 AMPERE

http://www.njzrg.com

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

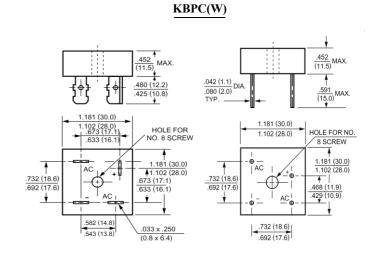
Suffix letter "P" added to indicate plastic

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



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25 ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

	Symbols	KBPC35005	KBPC3501	KBPC3502	KBPC3504	KBPC3506	KBPC3508	KBPC3510	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T_C =55	I _(AV)	35.0							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 17.5A DC and 25	V_{F}	1.1							Volts
	I_R	10.0 1000							uAmp
Typical Junction Capacitance (Note 1)	C_{J}	300							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.4							/W
Operating and Storage Temperature Range	T _J , Tstg	-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

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RATINGS AND CHARACTERISTIC CURVES

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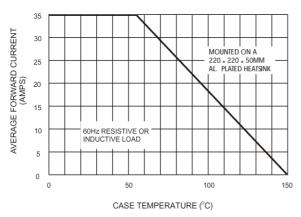


Figure 1. Forward Current Derating Curve

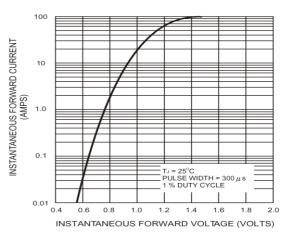


Figure 2. Typical Instantaneous Forward Characteristics Per Brdige Element

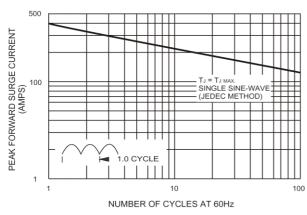


Figure 3. Maximum Non-repetitive Peak Forward Surge Current Per Bridge Element

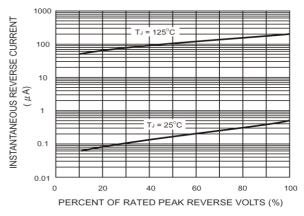


Figure 4. Typical Reverse Leakage Characteristics Per Bridge Element

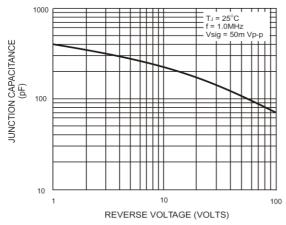


Figure 5. Typical Junction Capacitance Per Bridge Element

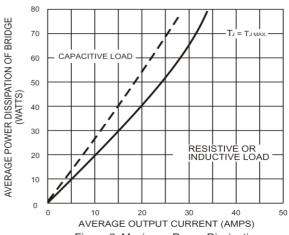


Figure 6. Maximum Power Dissipation