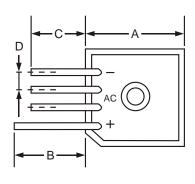


KBPC15005L THRU KBPC1510L

IN - LINE SINGLE - PHASE SILICON BRIDGE RECTIFIER **CURRENT - 15.0 AMPERES VOLTAGE - 50 TO 1000 VOLTS**



KBPC-L							
Dim	Min	Max					
Α	28.45	28.70					
В	19.05						
С	13.97						
D	5.10						
E	10.97	11.23					
G	1.02	_					
Н	3.05	3.60					
J	Metal heat sink						
	epoxy case						
All Dimensions in mm							

FEATURES

- Surge overload rating 300 amperes peak
- Integrally molded heat-sink provide very low thermal resistance for maximum heat dissipation.
- Universal 3 way terminals: snap-on, wire wrap-around, or P.C. board mounting.
- Plastic package used has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering guaranteed: 260°C/10 seconds at 5lbs. (2.3kg) tension

MECHANICAL DATA

Case: Molded plastic with heatsink integrally mounted in the bridge encapsulation

Terminals: wire lead ϕ 50 mils. Weight: 0.65 ounce, 18 grams



Ratings at 25°C ambient temperature unless otherwise specified Sing phase half-wave 60Hz, resistive or inductive load For capacitive load, derate current by 20%

	SYMBOL	KBPC 15005L	KBPC 1501L	KBPC 1502L	KBPC 1504L	KBPC 1506L	KBPC 1508L	KBPC 1510L	UNITS
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	Icaso	45.0							Amno
$T_A = 55^{\circ}C$	I(AV)	15.0							Amps
Peak Forward Surge Current 8.3ms Single	1	300							Amps
Half Sine-Wave Superimposed on Rated Load	IFSM								
Maximum Instantaneous Forward Voltage	Ī.,	1.2							Volts
Drop Per Bridge Element at 7.5A	VF								
Maximum DC Reverse Current T _A = 25 °C		10 500							μ Α
at Rated DC Blocking Voltage $T_A = 125$ °C	l IR								
Rating for fusing (t < 8.3ms)	l ² t				375				A ² s
Typical Junction Capacitance (NOTE 1)	CJ	300						pF	
Typical Thermal Resistance (NOTE 2)	R _θ JC				6.3				°C/W
Operating and Storage Temperature Range	ТJ, Tsтg			-5	5 to + 1	50			°C
NOTES:	•								

- 1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts
- 2. Thermal resistance from junction to case per bridge element
- 3. Bolt down on heatsink with silicon thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw



KBPC15005L THRU KBPC1510L

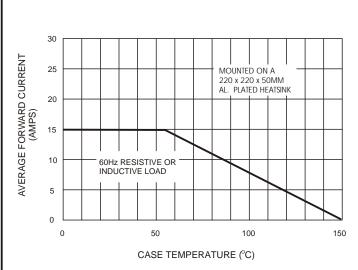


Figure 1. Forward Current Derating Curve

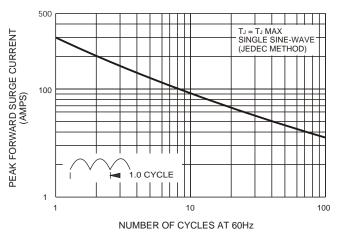


Figure 3. Maximum Non-repetitive Peak Forward Surge Current Per Bridge Element

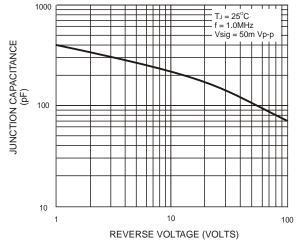


Figure 5. Typical Junction Capacitance Per Bridge Element

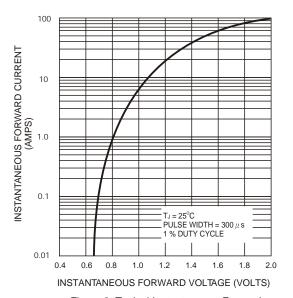


Figure 2. Typical Instantaneous Forward Characteristics Per Bridge Element

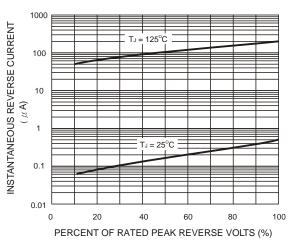


Figure 4. Typical Reverse Leakage Characteristics
Per Bridge Element

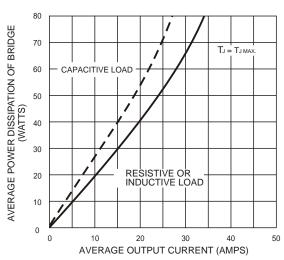


Figure 6. Maximum Power Dissipation