KBP005G THRU KBP10G

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V Current: 1.5A

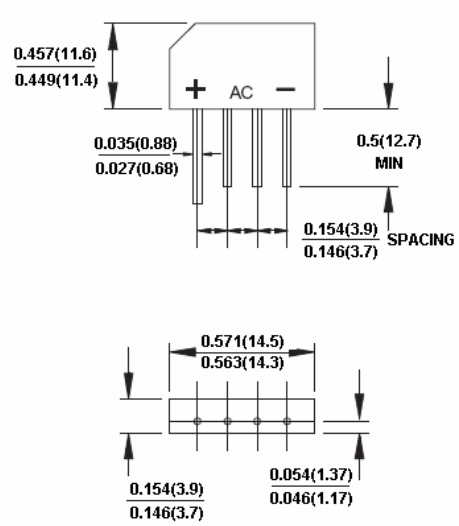
Features

Glass passivated chip junction
High case dielectric strength
High surge current capability
Ideal for printed circuit board

Mechanical Data

Terminal: Plated leads solderable perJ-STD-002
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: Polarity symbol marked on body
Mounting position: any

KBP



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	KBP 005G	KBP 01G	KBP 02G	KBP 04G	KBP 06G	KBP 08G	KBP 10G	units
Maximum repetitive peak reverse voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current Ta = 40℃	If(av)	1.5							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	Ifsm	50							A
Maximum instantaneous forward voltage drop per leg at 2.0A	Vf	1.1							V
Rating for fusing (t < 8.3ms)	I^2t	10							A^2Sec
Maximum DC reverse current at Ta = 25°C rated DC blocking voltage per leg Ta = 125°C	Ir	5.0 500							μA
Typical Thermal Resistance (Note 1) (Note 1) (Note 2)	Rth(ja) Rth(jl) Rth(jc)	25 8.0 10.0							℃/W
Typical junction capacitance per leg at 4.0V,1MHz	Cj	15							pF
Operating junction and storage temperature range	Tj, Tstg	-55 to +150							℃

Note:

1. Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.4″ ×0.4″ (10×10mm)copper pads
2. Thermal Resistance from Junction to Case Mounted on heatsink

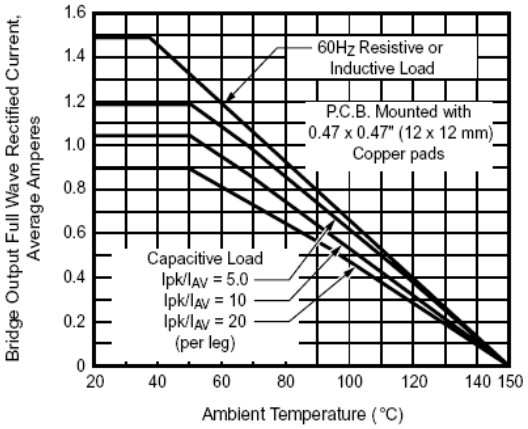


Figure 1. Derating Curve Output Rectified Current

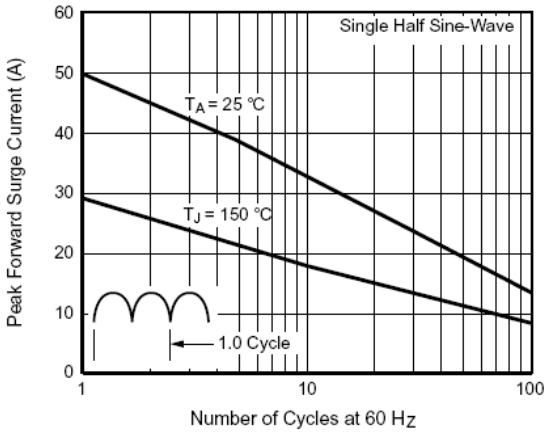


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

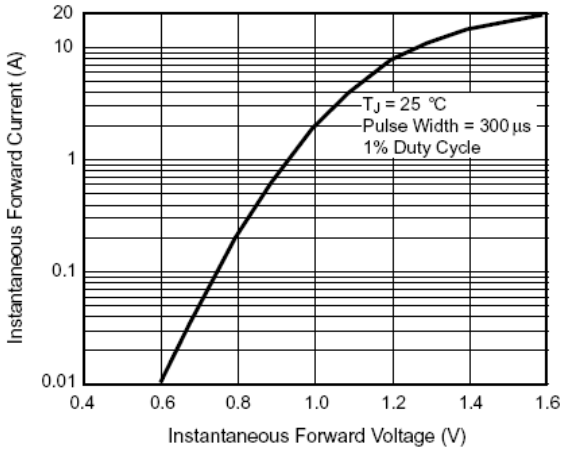


Figure 3. Typical Forward Characteristics Per Leg

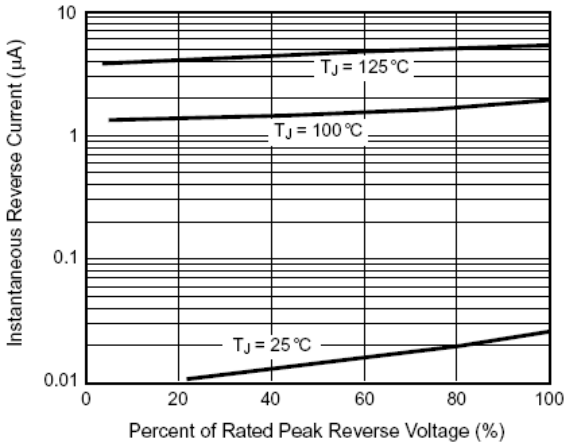


Figure 4. Typical Reverse Leakage Characteristics Per Leg

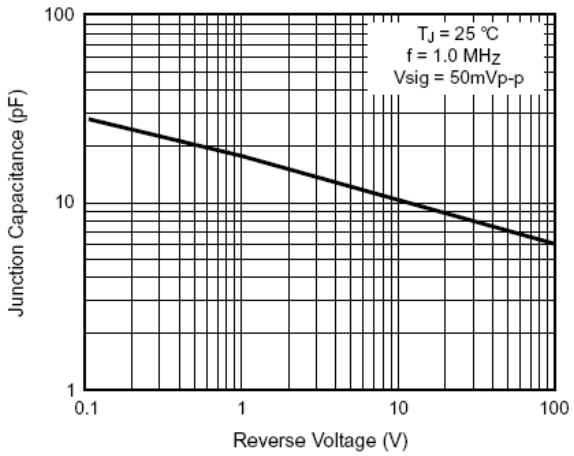


Figure 5. Typical Junction Capacitance Per Leg