KBP005M THRU KBP10M

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V Current:1.5A

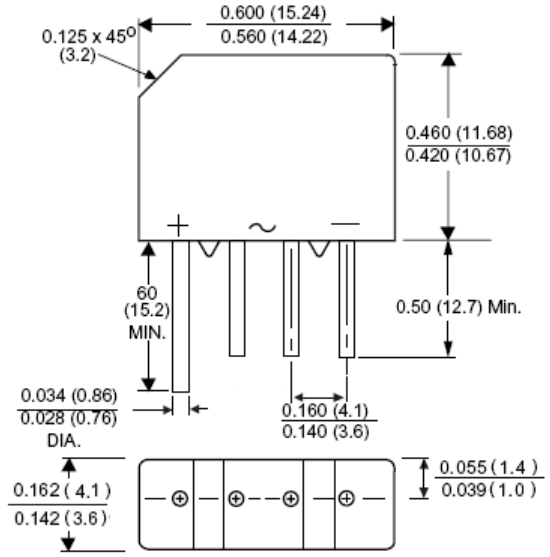
Features

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

Mechanical Data

Terminal: Plated leads solderable per J-STD-002
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: As marked on body

KBPM



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbol	KBP 005M	KBP 01M	KBP 02M	KBP 04M	KBP 06M	KBP 08M	KBP 10M	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 1.0A at 1.57A	Vf	1.0 1.3							V
Rating for fusing (t < 8.3ms)	I^2t	10							A^2Sec
Maximum DC reverse current at rated DC blocking voltage per leg Ta = 25°C Ta = 125°C	Ir	5.0 500							μA
Typical Thermal Resistance (Note 1)	Rth(ja) Rth(jl)	40 13							℃/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 0.47″ ×0.47″ (12×12mm)copper pads
* HEDEC registered values

RATINGS AND CHARACTERISTIC CURVES KBP005M THRU KBP10M

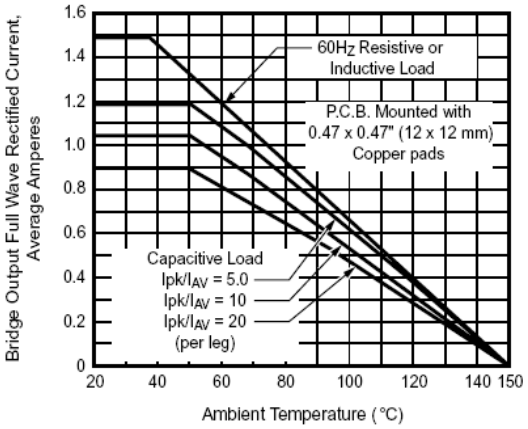


Figure 1. Derating Curve Output Rectified Current

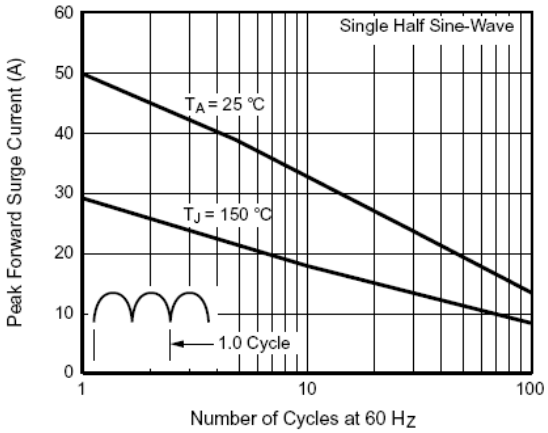


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

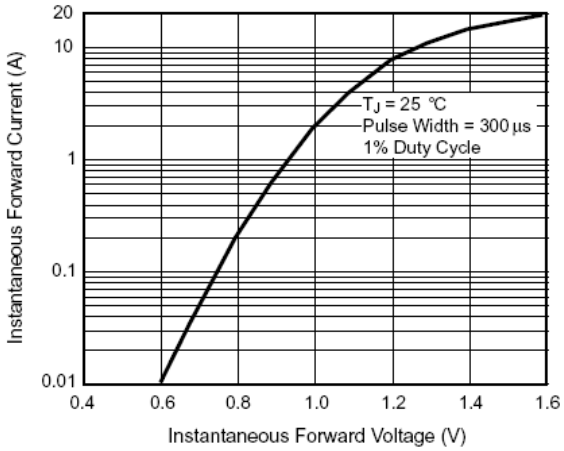


Figure 3. Typical Forward Characteristics Per Leg

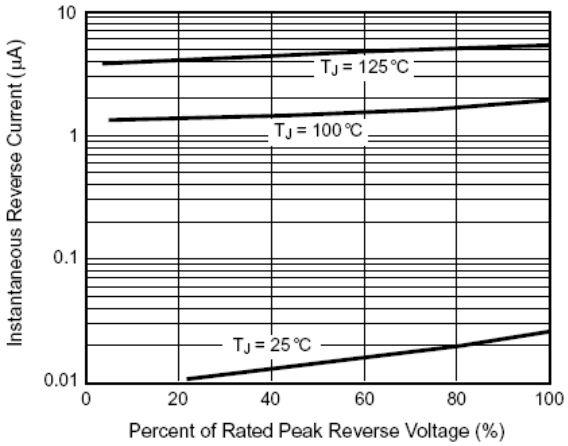


Figure 4. Typical Reverse Leakage Characteristics Per Leg

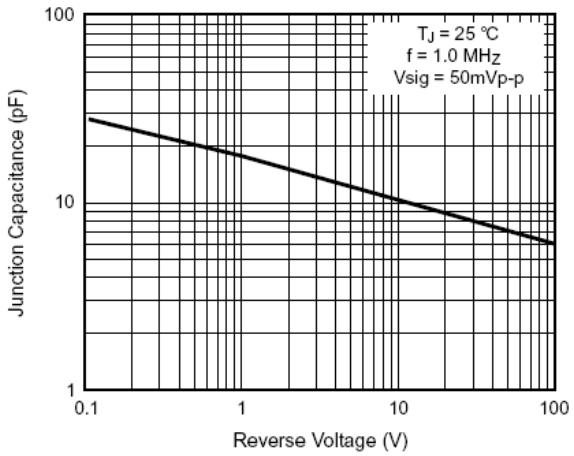


Figure 5. Typical Junction Capacitance Per Leg