KBP3005G THRU KBP310G

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V Current:3.0A

GULF SEMI

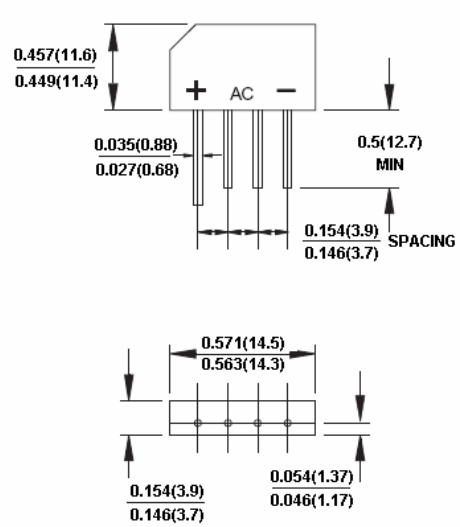
Features

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

Mechanical Data

Terminal: Plated leads solderable per MIL-STD 202E, Method 208C
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: As marked on body

KBP



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, for capacitive load, derate current by 20%)

	Symbol	KBP3 005G	KBP 301G	KBP 302G	KBP 304G	KBP3 06G	KBP3 08G	KBP 310G	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 =55℃	If(av)	3.0							A
Peak forward surge current 50 Hz single half sine-wave superimposed on rated load	Ifsm	80							A
Maximum instantaneous forward voltage drop per diode at 3.0A	Vf	1.05							V
Rating for fusing (t < 10ms)	I^2t	32							A^2Sec
Maximum DC reverse current at Ta = 25℃ rated DC blocking voltage per leg Ta = 125℃	Ir	5.0 500							μA
Maximum thermal resistance per leg (Note1)	Rth(ja) Rth(jc)	30 11							℃/W
Typical junction capacitance per leg at 4.0V,1MHz	Cj	25							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 x 047" (12 x 12mm) copper pads

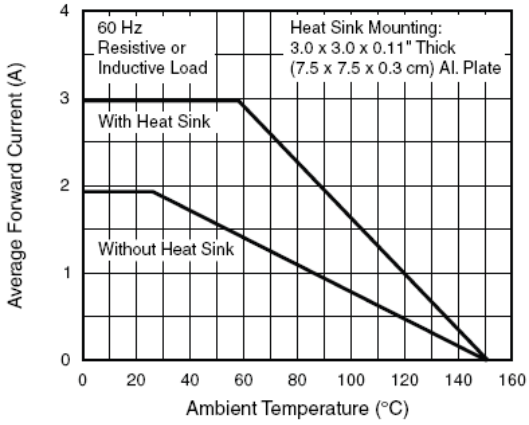


Figure 1. Forward Current Derating Curve

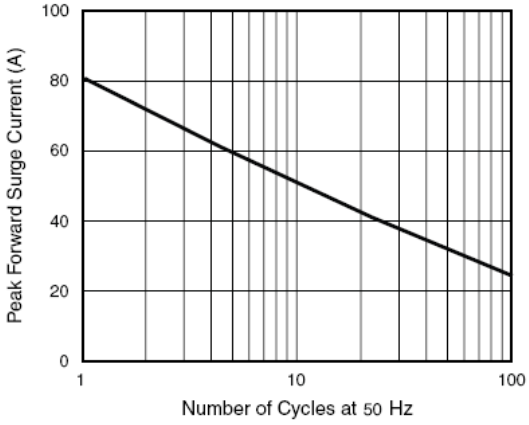


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

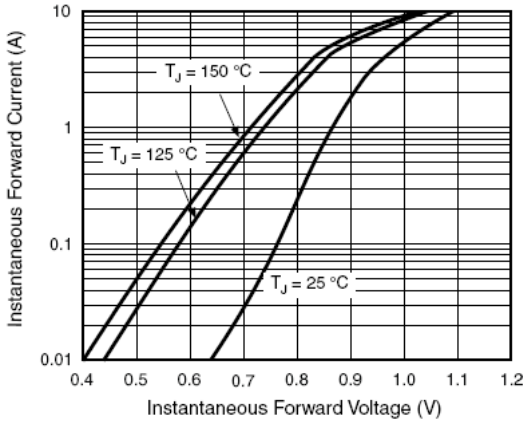


Figure 3. Typical Forward Characteristics Per Diode

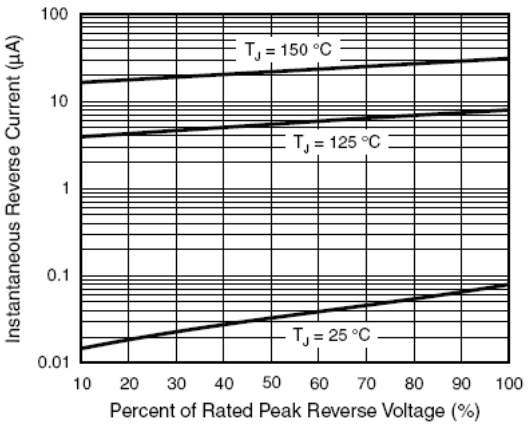


Figure 4. Typical Reverse Leakage Characteristics Per Diode

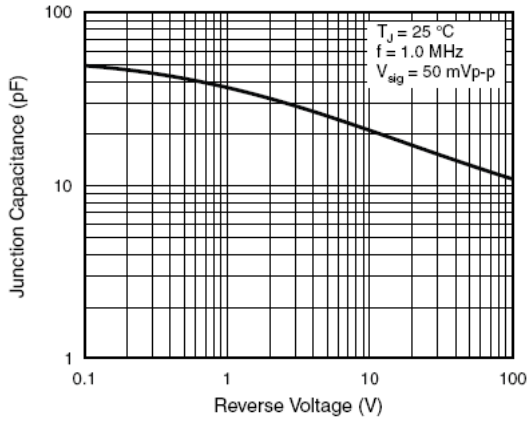


Figure 5. Typical Junction Capacitance Per Diode