

KBP005G THRU KBP10G

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V

Current: 1.5A



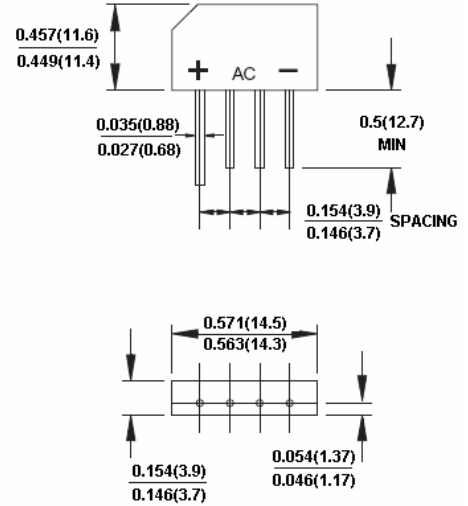
Features

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

Mechanical Data

Terminal: Plated leads solderable per MIL-STD 202E,
Method 208C
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,
for capacitive load, derate current by 20%)

	Symbol	KBP 005G	KBP 01G	KBP 02G	KBP 04G	KBP 06G	KBP 08G	KBP 10G	units
Maximum repetitive peak reverse voltage	V _{rrm}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{rms}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{dc}	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current Ta = 40°C	I _{f(av)}	1.5							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{fsm}	50							A
Maximum instantaneous forward voltage drop per leg at 2.0A	V _f	1.1							V
Rating for fusing (t < 8.3ms)	I ² t	10							A ² Sec
Maximum DC reverse current at rated DC blocking voltage per leg Ta = 25°C Ta = 125°C	I _r	5.0 500							μA
Typical Thermal Resistance (Note 1)	R _{th(ja)}	25							°C/W
(Note 1)	R _{th(jl)}	8.0							
(Note 2)	R _{th(jc)}	10.0							
Typical junction capacitance per leg at 4.0V,1MHz	C _j	15							pF
Operating junction and storage temperature range	T _j , T _{stg}	-55 to +150							°C

Note:

- 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
- Thermal Resistance from Junction to Case Mounted on heatsink

RATINGS AND CHARACTERISTIC CURVES KBP005G THRU KBP10G

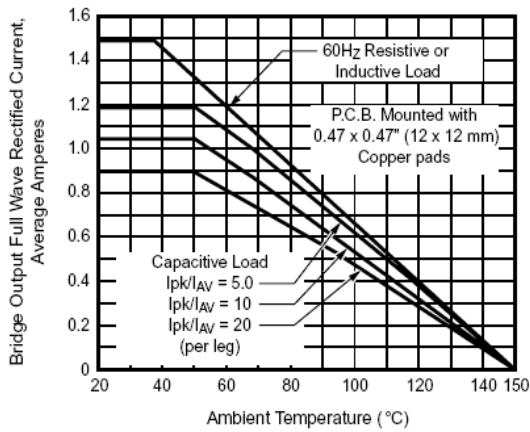


Figure 1. Derating Curve Output Rectified Current

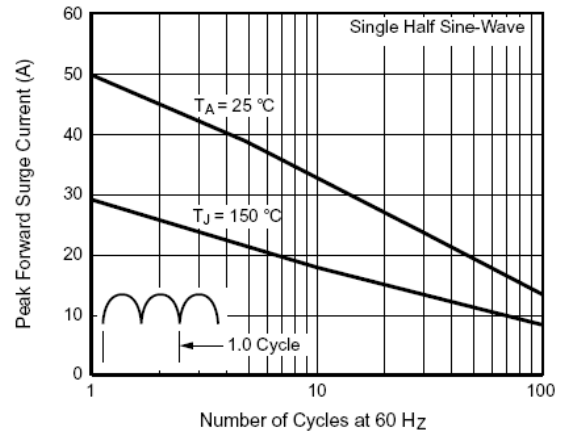


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

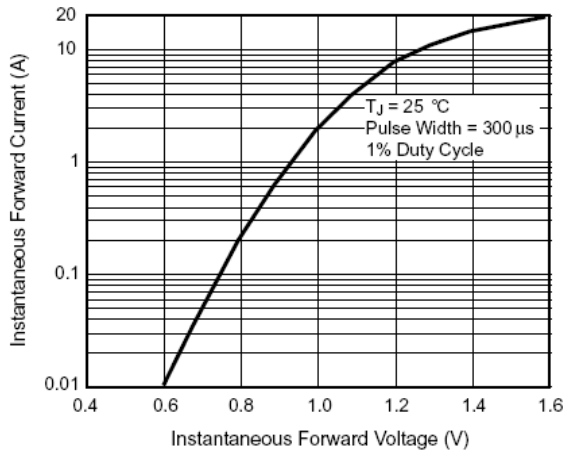


Figure 3. Typical Forward Characteristics Per Leg

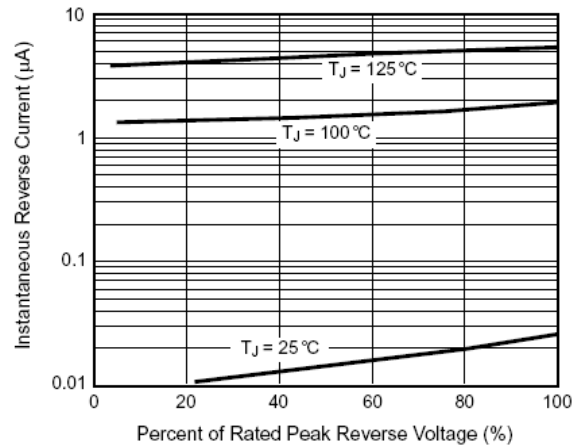


Figure 4. Typical Reverse Leakage Characteristics Per Leg

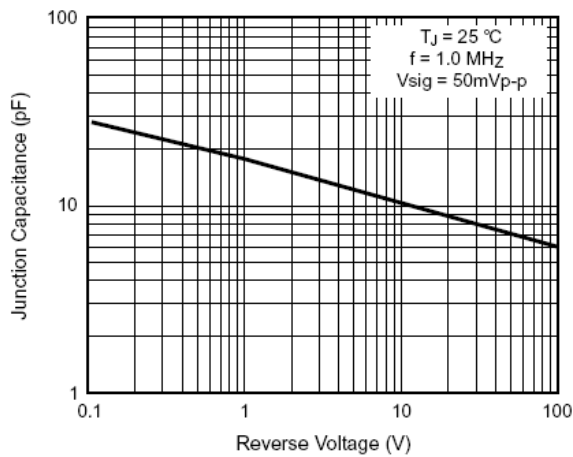


Figure 5. Typical Junction Capacitance Per Leg