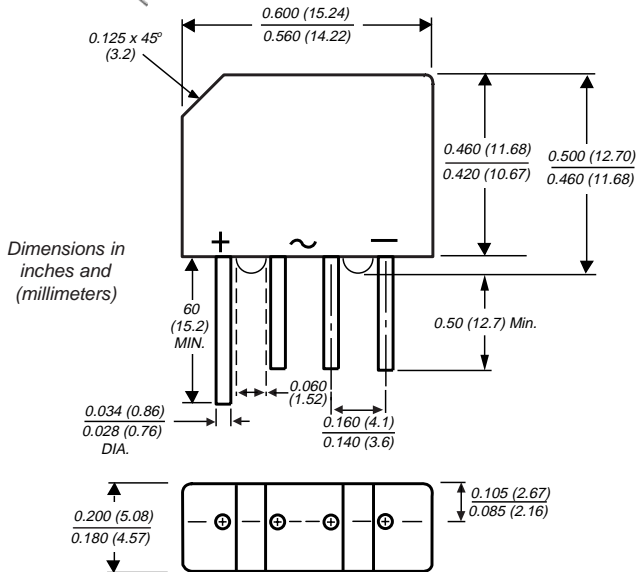


Glass Passivated Single-Phase Bridge Rectifiers

Rev. Voltage 50 to 1000V
Forward Current 1.5A

Case Style KBPM



Polarity shown on front side of case: positive lead by beveled corner

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under Recognized Component Index, file number E54214
- Glass passivated chip junctions
- High surge current capability
- Ideal for printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs. (2.3kg) tension

Mechanical Data

- Case:** Molded plastic body over passivated junctions
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on case
Mounting Position: Any
Weight: 0.06 oz., 1.7 g
Packaging codes/options:
 1/600 EA. per Bulk Tray Stack

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symb.	KBP 005M	KBP 01M	KBP 02M	KBP 04M	KBP 06M	KBP 08M	KBP 10M	Unit
		3N246	3N247	3N248	3N249	3N250	3N251	3N252	
* 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
Max. average forward output rectified current at T _A = 40°C	I _{F(AV)}	1.5							A
* Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) T _J = 150°C	I _{FSM}	50 30							A
Rating for fusing (t < 8.3ms)	I ² t	10							A ² sec
Typical thermal resistance per leg ⁽¹⁾	R _{θJA}	40							°C/W
	R _{θJL}	13							
* Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150							°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

* Max. instantaneous at forward voltage drop at	1.0A per leg 1.57A per leg	V _F	1.0 1.3	V
* Maximum DC reverse current at rated DC blocking voltage per leg	T _A = 25°C T _A = 125°C	I _R	5.0 500	μA
Typical junction capacitance per leg at 4.0V, 1MHz		C _J	15	pF

Note: (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with, 0.47 x 0.47" (12 x 12mm) copper pads
 * JEDEC registered values

Vishay Semiconductors
formerly General Semiconductor

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 – Derating Curve Output Rectified Current

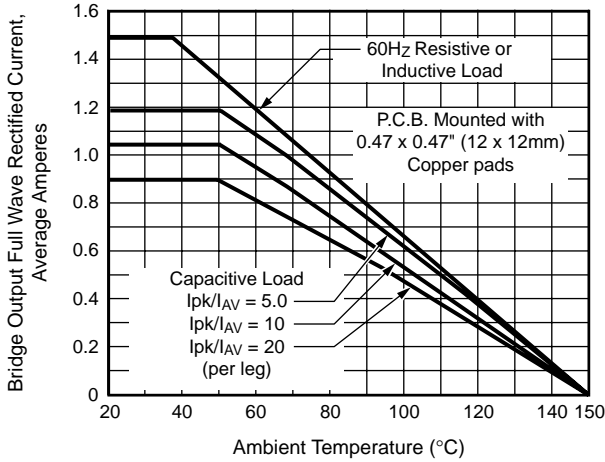


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

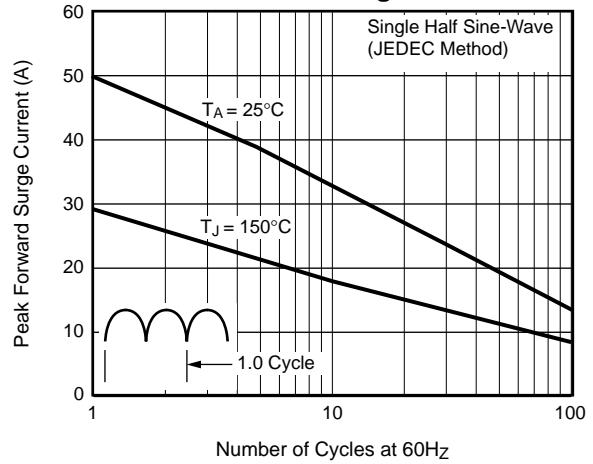


Fig. 3 – Typical Forward Characteristics Per Leg

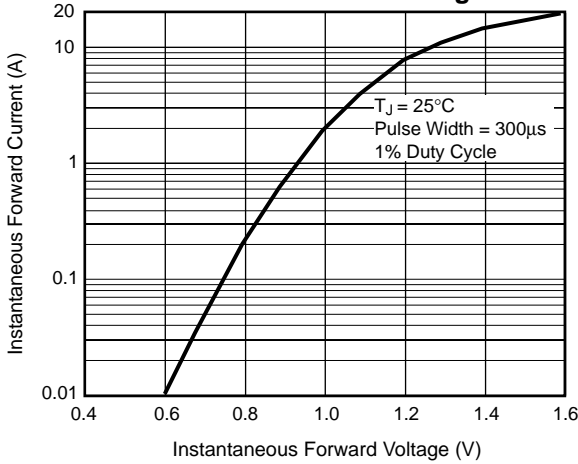


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

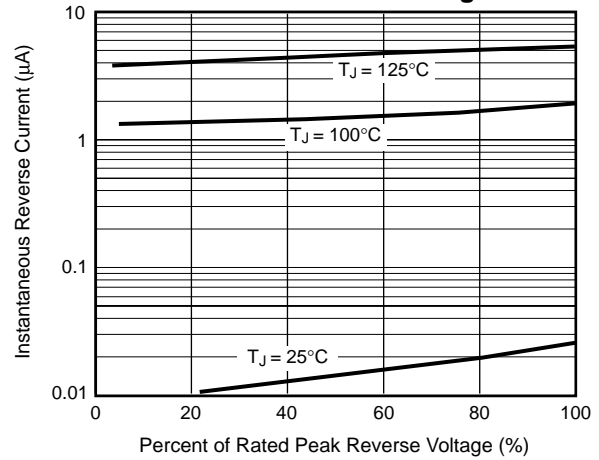


Fig. 5 – Typical Junction Capacitance Per Leg

