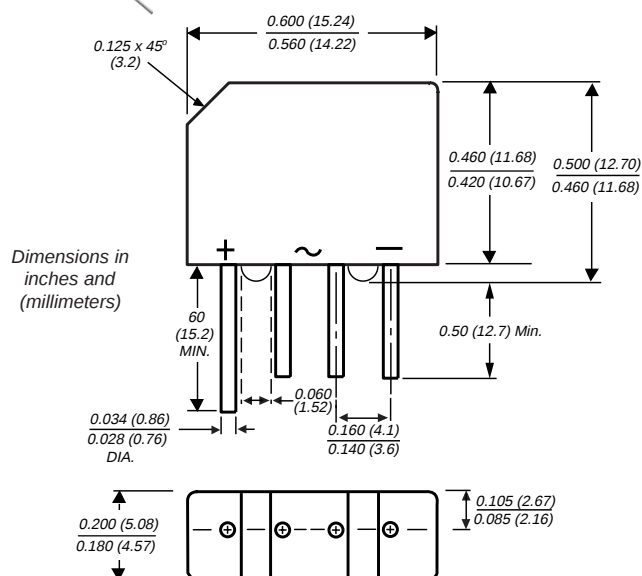


Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 50 to 1000 V
Forward Current 2.0 A**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
- Typical I_R less than 0.1 μ A
- High case dielectric strength
- 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	Symbols	2KBP 005M	2KBP 01M	2KBP 02M	2KBP 04M	2KBP 06M	2KBP 08M	2KBP 10M	Units
		3N253	3N254	3N255	3N256	3N257	3N258	3N259	
* 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 output rectified current at $T_A=55^\circ\text{C}$	$I_{F(AV)}$	2.0							A
* Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) $T_J=150^\circ\text{C}$	I_{FSM}	60							A
Rating for fusing ($t < 8.3\text{ms}$)	I^2t	15							A ² sec
Typical thermal resistance per leg ⁽¹⁾	$R_{\theta JA}$ $R_{\theta JL}$	30 11							°C/W
* Operating junction and storage temperature range	T_J, T_{STG}	-55 to +165							°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

* Maximum instantaneous forward voltage drop per leg at 3.14A	V_F	1.1	V
* Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage per leg $T_A=125^\circ\text{C}$	I_R	5.0 500	μ A
Typical junction capacitance per leg at 4.0V, 1MHz	C_J	25	pF

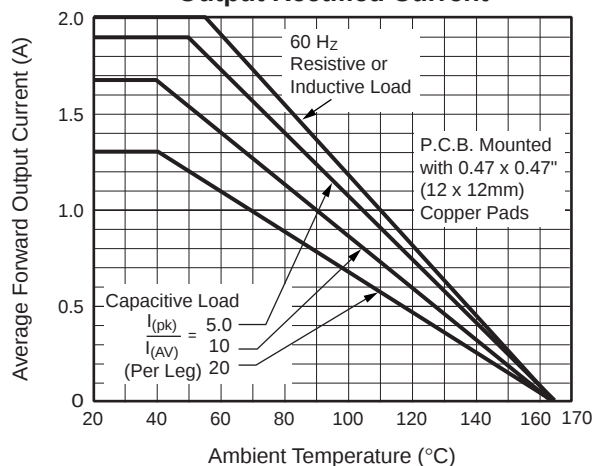
Notes: (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with, 0.47 x 0.47" (12 x 12mm) copper pads

* JEDEC registered values

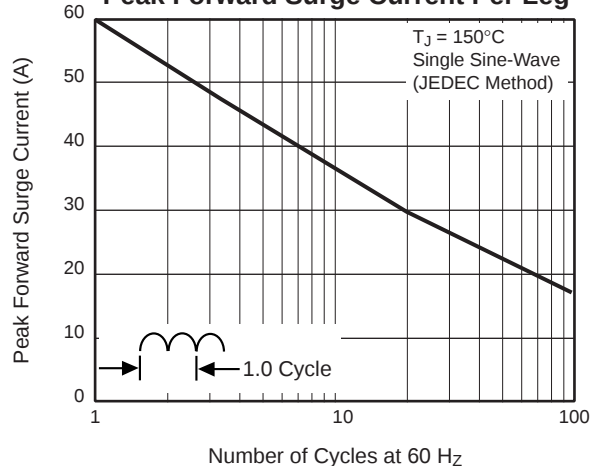
Vishay Semiconductors
formerly General Semiconductor

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

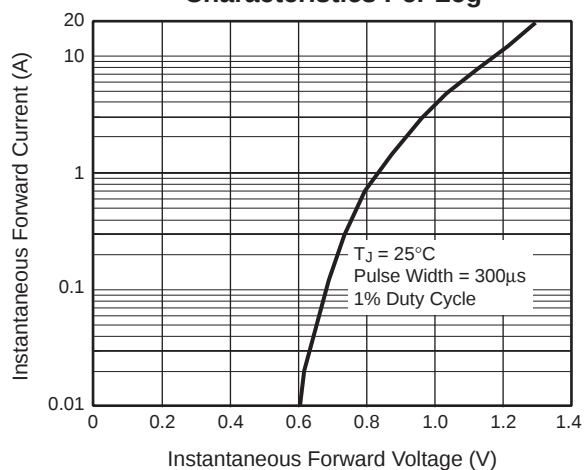
**Fig. 1 — Derating Curve
Output Rectified Current**



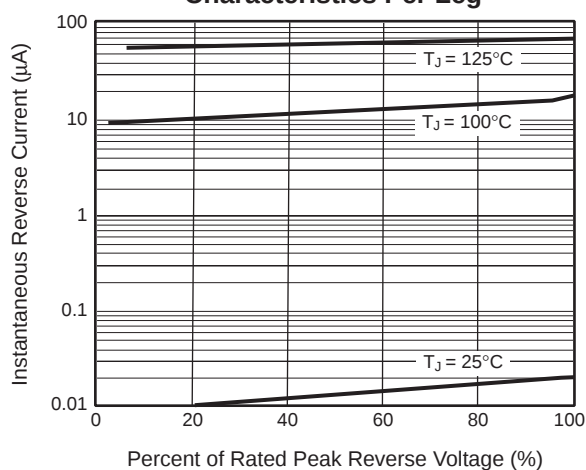
**Fig. 2 — Maximum Non-Repetitive
Peak Forward Surge Current Per Leg**



**Fig. 3 — Typical Forward
Characteristics Per Leg**



**Fig. 4 — Typical Reverse Leakage
Characteristics Per Leg**



**Fig. 5 — Typical Junction
Capacitance Per Leg**

