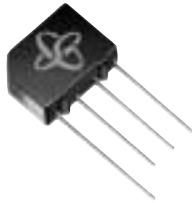


2KBP005M thru 2KBP10M 3N253 thru 3N259

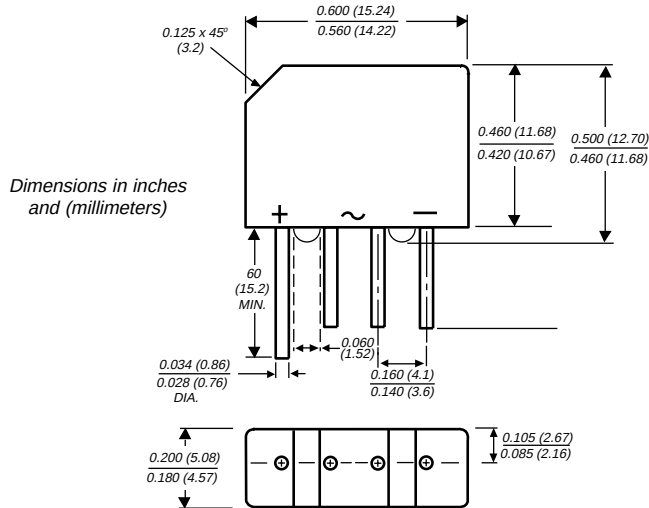
Glass Passivated Single-Phase Bridge Rectifier

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 ounce, 1.7 grams

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

		2KBP 005M	2KBP 01M	2KBP 02M	2KBP 04M	2KBP 06M	2KBP 08M	2KBP 10M	
	SYMBOLS	3N253	3N254	3N255	3N256	3N257	3N258	3N259	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 output rectified current at T _A =55°C	I _{F(AV)}	2.0							A
* Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) T _J =150°C	I _{FSM}	60							A
Rating for fusing (t < 8.3ms)	I²t	15							A²sec
Typical thermal resistance per leg (NOTE 1)	R _{θJA}	30							°C/W
	R _{θJL}	11							
* 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.

		2KBP 005M	2KBP 01M	2KBP 02M	2KBP 04M	2KBP 06M	2KBP 08M	2KBP 10M	
	SYMBOLS	3N253	3N254	3N255	3N256	3N257	3N258	3N259	UNITS
* 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

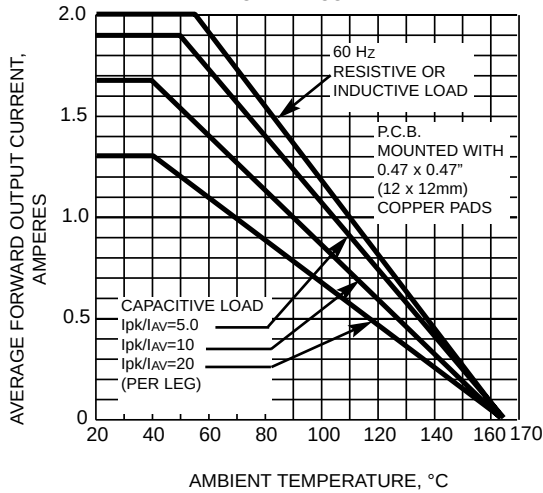
NOTES:

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with, 0.47 x 0.47" (12 x12mm) copper pads

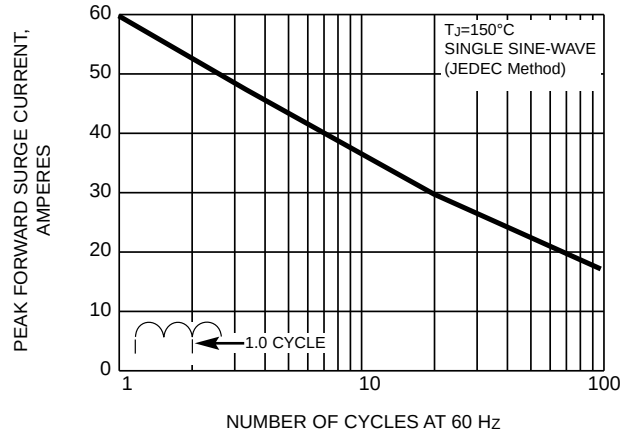
* JEDEC registered values

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

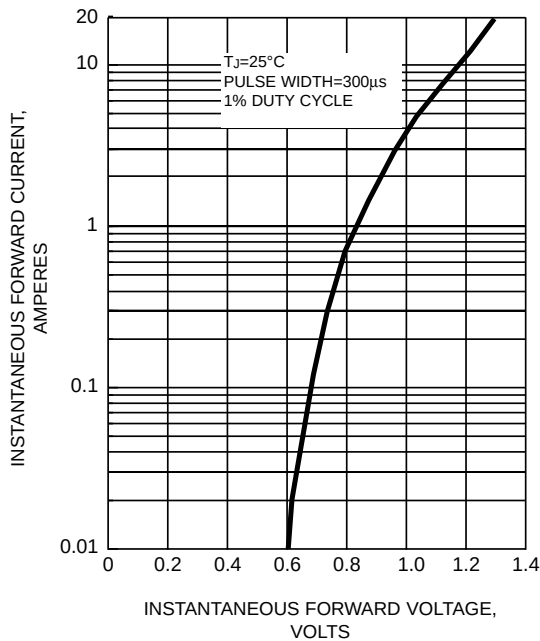
**FIG. 1 - DERATING CURVE OUTPUT
RECTIFIED CURRENT**



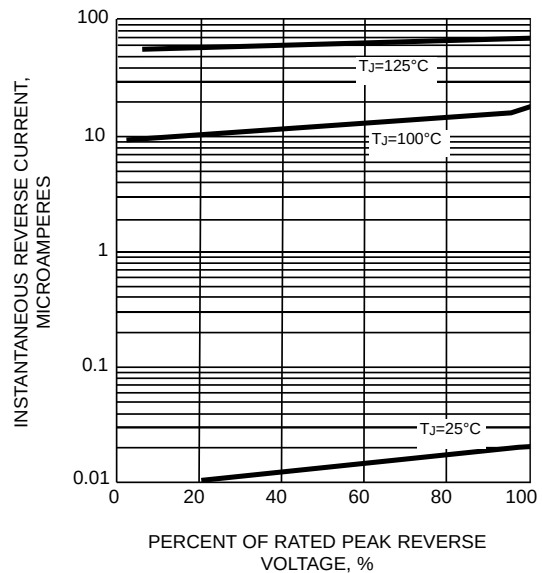
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER LEG**



**FIG. 3 - TYPICAL FORWARD CHARACTERISTICS
PER LEG**



**FIG. 4 - TYPICAL REVERSE LEAKAGE
CHARACTERISTICS PER LEG**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE
PER LEG**

