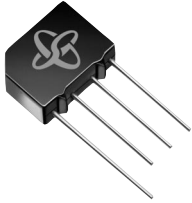


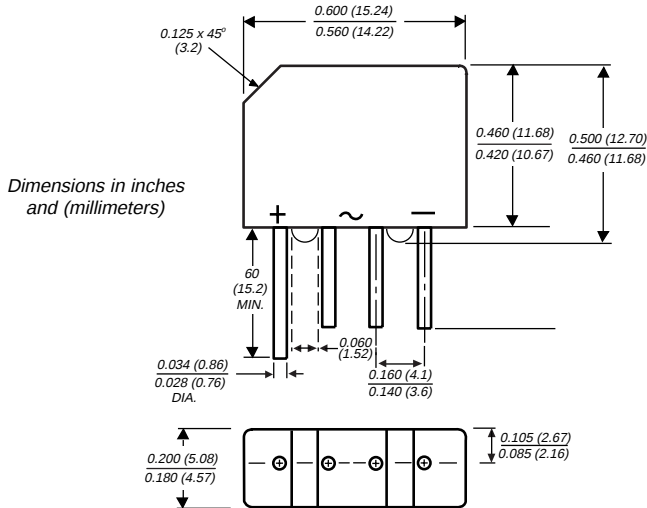
2KBP005M thru 2KBP10M 3N253 thru 3N259

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 $0.1\mu A$
- 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 $T_A=55^\circ C$	$I_F(AV)$	2.0							A
* Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) $T_J=150^\circ C$	I_{FSM}	60							A
Rating for fusing ($t < 8.3ms$)	I^2t	15							A ² sec
Typical thermal resistance per leg (NOTE 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.

		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 $T_A=25^\circ C$ at rated DC blocking voltage per leg $T_A=125^\circ C$	I_R	5.0 500							μA
Typical junction capacitance per leg at 4.0V, 1MHz	C_J	25							pF

NOTES:

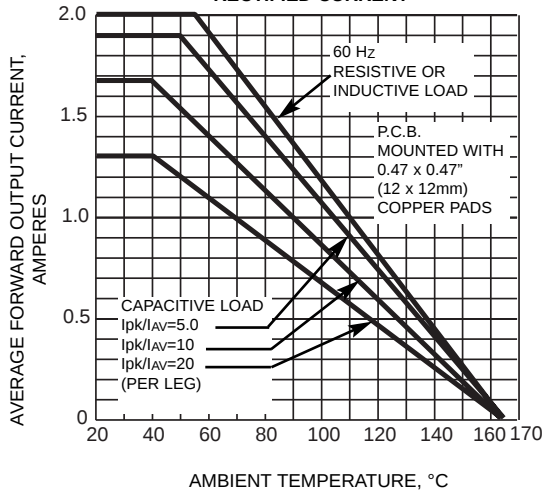
(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with, 0.47 x 0.47" (12 x12mm) copper pads

* JEDEC registered values

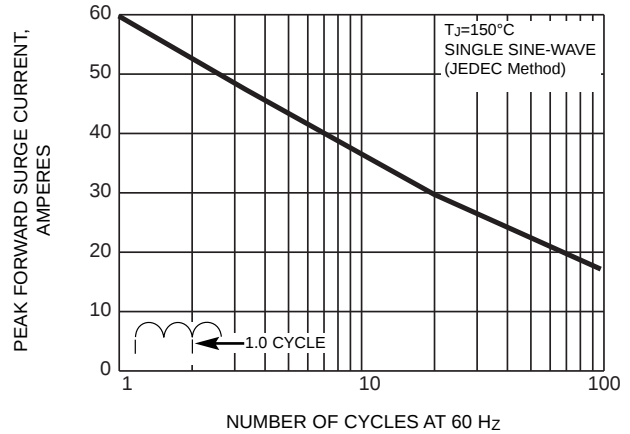
2KBP005M thru 2KBP10M 3N253 thru 3N259

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

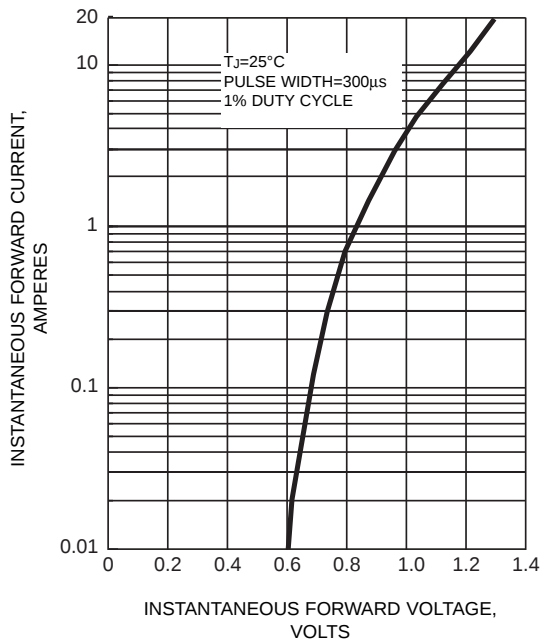
**FIG. 1 - DERATING CURVE OUTPUT
RECTIFIED CURRENT**



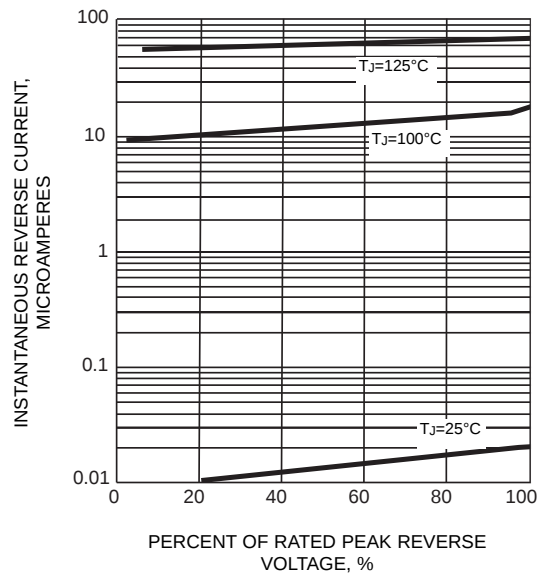
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER LEG**



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



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



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

