SEMICONDUCTOR

DATA SHEET

2KBP005M THRU 2KBP10M

Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 50 to 1000 V Forward Current 2.0 A

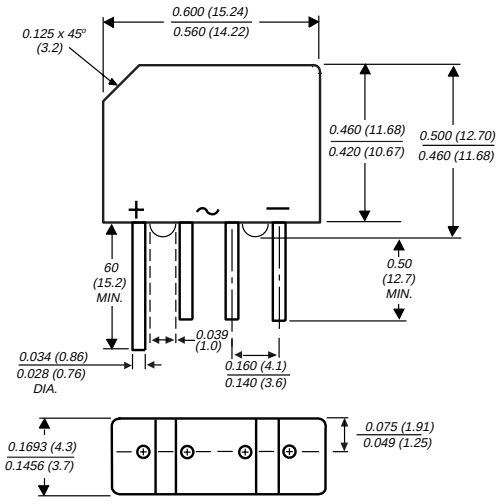
KBPM Unit:inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under Recognized Component Index, file number E54214
- Typical IR less than 0.1 μA
- High case dielectric strength
- Ideal for printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs. (2.3kg) tension
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

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



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

Dimensions in inches and (millimeters)

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
*** Maximum repetitive peak reverse voltage**	VRRM	50	100	200	400	600	800	1000	V
*** Maximum RMS voltage**	VRMS	35	70	140	280	420	560	700	V
*** Maximum DC blocking voltage**	VDC	50	100	200	400	600	800	1000	V
Maximum average forward output rectified current at TA=55°C	IF(AV)	2.0							A
*** Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) TJ=150°C**	IFSM	60							A
Rating for fusing (t < 8.3ms)	I2t	15							A2sec
Typical thermal resistance per leg (1)	RΘJA RΘJL	30 11							°C/W
*** Operating junction and storage temperature range**	TJ, TSTG	-55 to +150							°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

*** Maximum instantaneous forward voltage drop per leg at 2A**	VF	1.1	V
*** Maximum DC reverse current TA=25°C at rated DC blocking voltage per leg TA=125°C**	IR	5.0 500	μA
Typical junction capacitance per leg at 4.0V, 1MHZ	CJ	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

DEVICE CHARACTERISTICS

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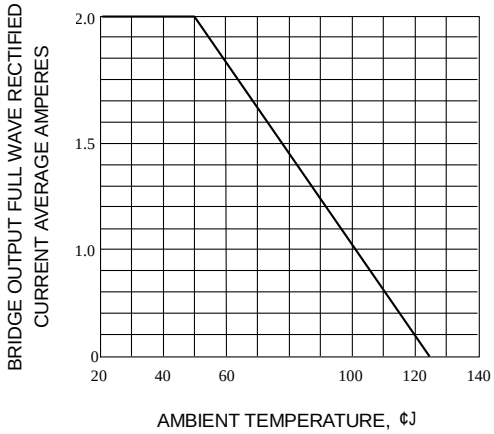

Fig. 1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

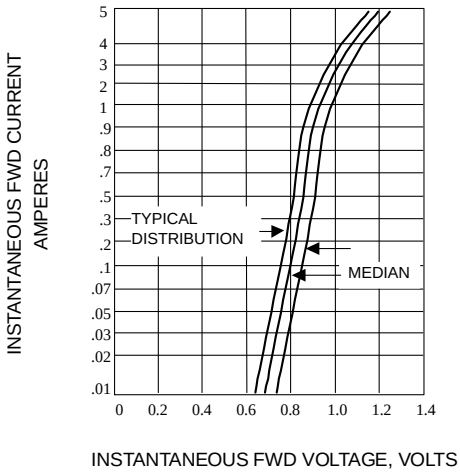

Fig. 2-TYPICAL FORWARD CHARACTERISTICS(25 ¢J)

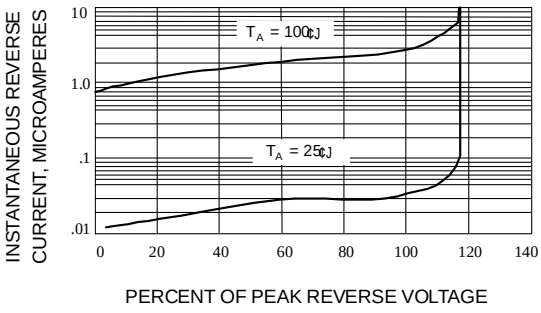

Fig. 3-TYPICAL REVERSE CHARACTERISTICS

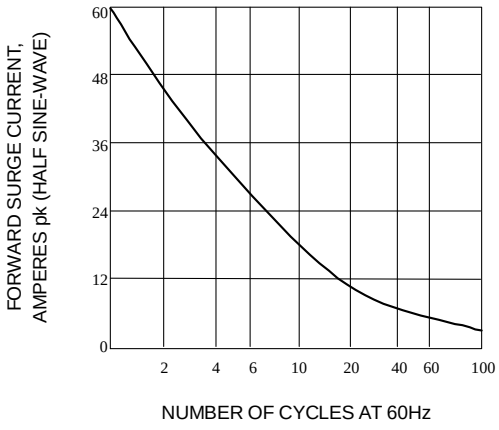

Fig. 4-NON-RECURRENT SURGE RATING