



# 2KBP005M/3N253 THRU 2KBP10M/3N259

IN-LINE GLASS PASSIVATED SINGLE PHASE RECTIFIER BRIDGE

VOLTAGE - 50 to 1000 Volts CURRENT - 2.0 Amperes

## KBPM

### FEATURES

- Surge overload rating: 60 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriter Laboratory Flammability Classification 94V-0
- Reliable low cost construction utilizing molded plastic technique

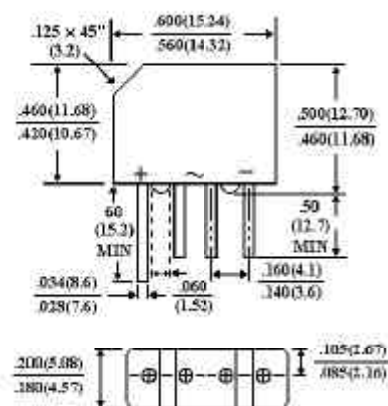
### MECHANICAL DATA

Terminals: Lead solderable per MIL-STD-202,

Method 208

Mounting position: Any

Weight: 0.06 ounce, 1.7 grams



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

	2KBP005M 3N253	2KBP01M 3N254	2KBP02M 3N255	2KBP04M 3N256	2KBP06M 3N257	2KBP08M 3N258	2KBP10M 3N259	UNIT
Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Max RMS Bridge input Voltage	35	70	140	280	420	560	700	V
Max DC Blocking Voltage	50	100	200	400	600	800	1000	V
Max Average Rectified Output Current at 25 °C Ambient	2.0							A
Peak One Cycle Surge Overload Current	60.0							A
Max Forward Voltage Drop per Bridge Element at 3.14A dc	1.1							V
Max (Total Bridge) Reverse Leakage at Rated DC Blocking Voltage	5							µgA
Max (Total Bridge) Reverse Leakage at Rated DC Blocking Voltage and 100 °C	0.5							mA
I <sup>2</sup> t Rating for fusing (t < 8.35ms)	15							A <sup>2</sup> S
Typical Junction capacitance per leg (Note 1) C <sub>J</sub>	25.0							pF
Typical Thermal resistance per leg (Note 2) R <sub>θJK</sub>	30.0							°C/W
Typical Thermal resistance per leg (Note 2) R <sub>θJKL</sub>	11.0							°C/W
Operating Temperature Range	-55 to +125							°C
Storage Temperature Range	-55 to +150							°C

### NOTES:

- Measured at 1 MHz and applied reverse voltage of 4.0 Volts
- 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

RATING AND CHARACTERISTIC CURVES

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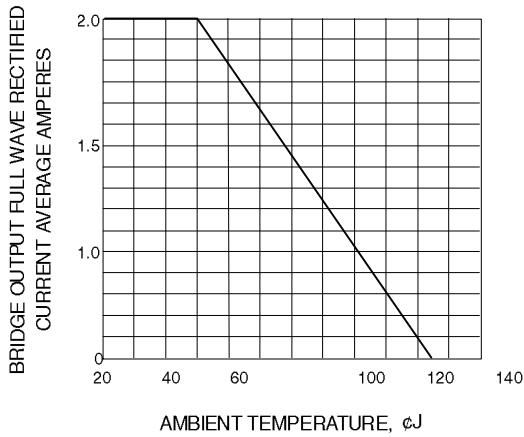


Fig. 1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

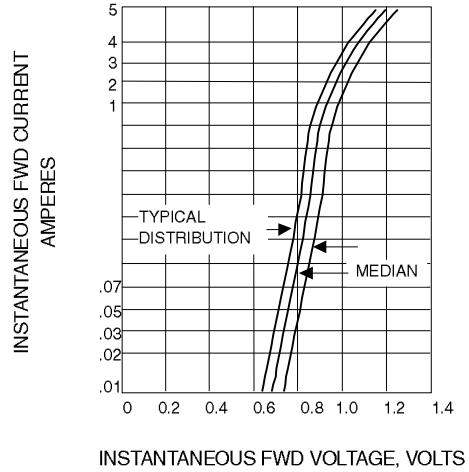


Fig. 2-TYPICAL FORWARD CHARACTERISTICS(25 °C)

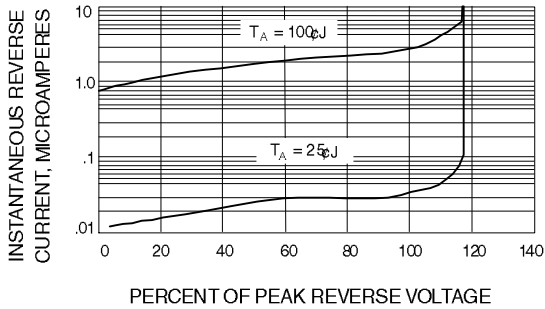


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

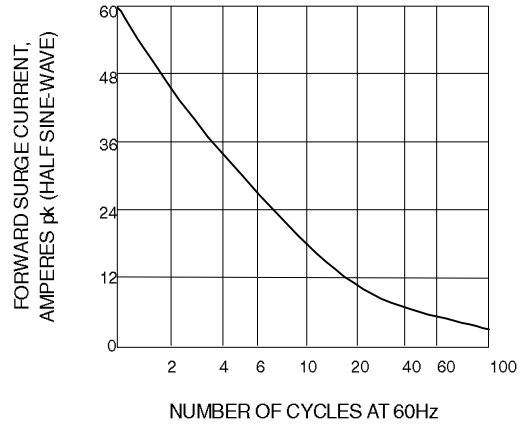


Fig. 4-NON-RECURRENT SURGE RATING