



# DATA SHEET

## 2KBP005M thru 2KBP10M

### IN-LINE GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

**VOLTAGE** 50 to 1000 Volts **CURRENT** 2.0 Amperes

**File#E111753**

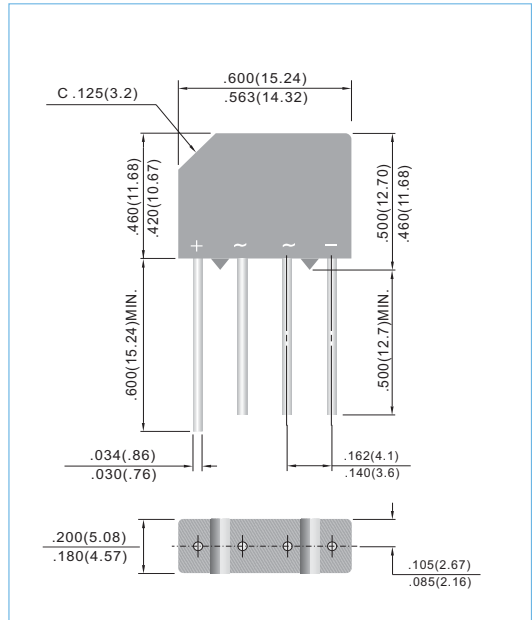
#### FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

#### MECHANICAL DATA

Terminals: Leads solderable per MIL-STD-202G, Method 208  
Mounting position: Any  
Weight: 0.06 ounce, 1.70 grams

KBPM Unit: inch (mm)



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.  
For Capacitive load derate current by 20%.

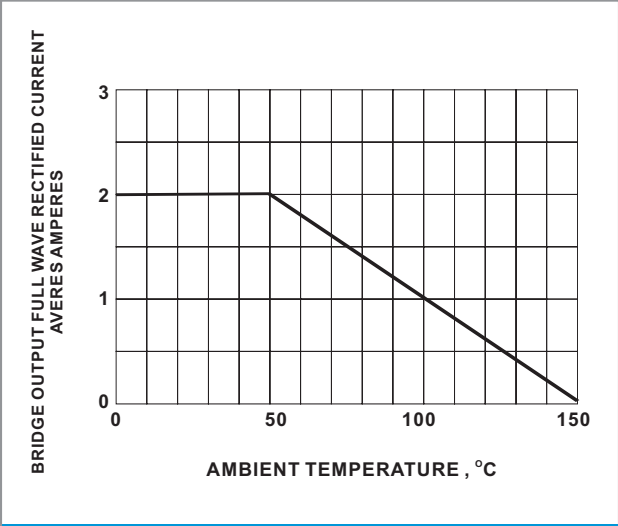
PARAMETER	SYMBOL	2KBP005M	2KBP01M	2KBP02M	2KBP04M	2KBP06M	2KBP08M	2KBP10M	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current For Resistive Load at TA=50°C	I <sub>AV</sub>	2.0							A
Peak One Cycle Surge Overload Current	I <sub>FSM</sub>	60							A
Maximum Forward Voltage per Bridge Element at 3.14A DC	V <sub>F</sub>	1.1							V
Maximum Reverse Leakage Current at Rated @ TA=25°C Dc Blocking Voltage @ TA=100°C	I <sub>R</sub>	5 500							uA
Pt Rating for fusing ( t<8.35ms)	P <sub>t</sub>	15							A <sup>2</sup> t
Typical junction capacitance per leg (Note 1)	C <sub>J</sub>	25							pF
Typical Thermal Resistance per leg (Note 2)	R <sub>θJA</sub> R <sub>θJL</sub>	30 11							°C/W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

#### NOTES:

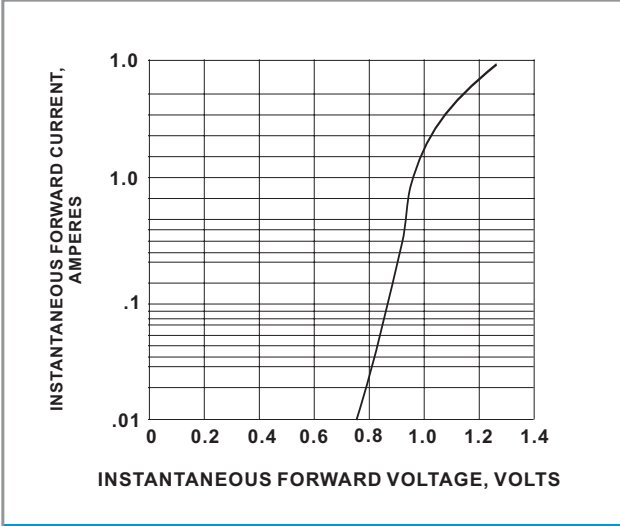
1. Measured at 1.0MHZ and applied reverse voltage of 4.0 volts
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.47 x 0.47"(12 x 12mm)copper pads.



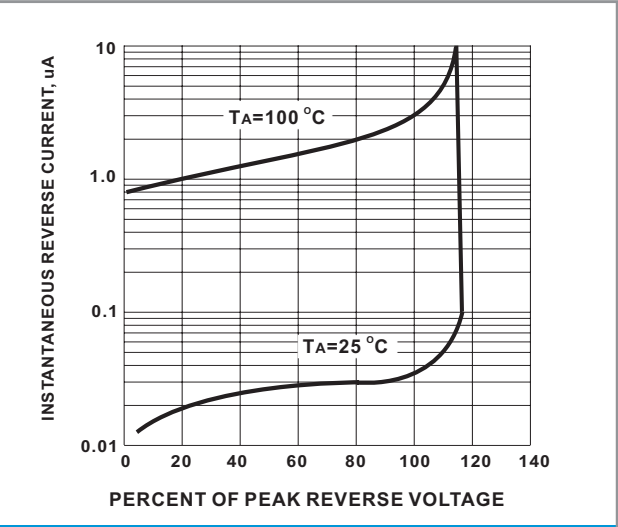
**RATING AND CHARACTERISTIC CURVES**



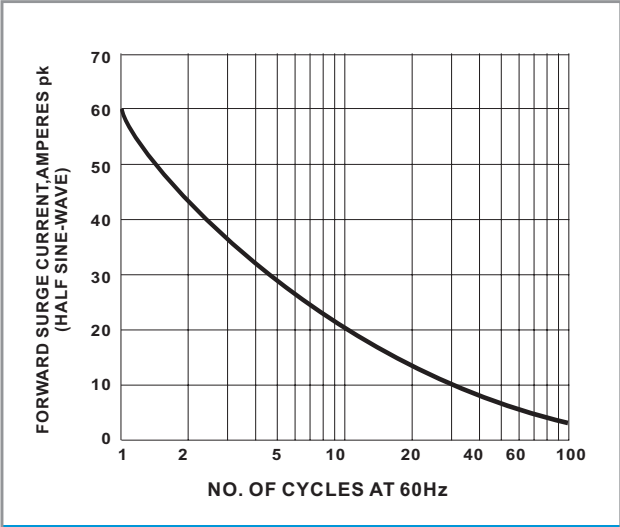
**Fig.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**Fig.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**Fig.3 TYPICAL PEAK REVERSE CHARACTERISTICS**



**Fig.4 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**