PANJIT SEMI CONDUCTOR

DATA SHEET

2KBP005M thru 2KBP10M

IN-LINE GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

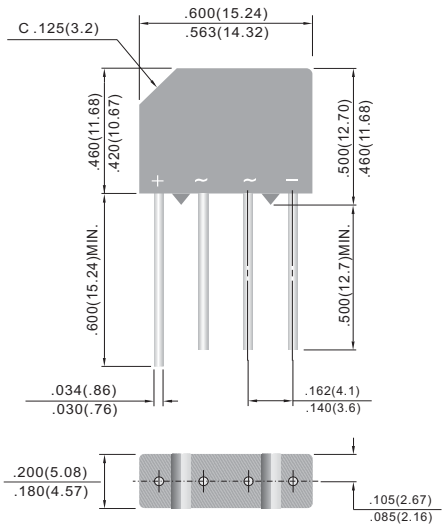
VOLTAGE 50 to 1000 Volts **CURRENT** 2.0 Amperes

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

KBPM Unit: inch (mm)



MECHANICAL DATA

Terminals: Leads solderable per MIL-STD-202G, Method 208

Mounting position: Any

Weight: 0.06 ounce, 1.70 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°Cambient 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_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 Current For Resistive Load at TA=50°C	I_{AV}	2.0							A
Peak One Cycle Surge Overload Current	I_{FSM}	60							A
Maximum Forward Voltage per Bridge Element at 3.14A DC	V_F	1.1							V
Maximum Reverse Leakage Current at Rated @ TA=25°C Dc Blocking Voltage @ TA=100°C	I_R	5 500							uA
I^2t Rating for fusing (t<8.35ms)	I^2t	15							A^2t
Typical junction capacitance per leg (Note 1)	C_J	25							pF
Typical Thermal Resistance per leg (Note 2)	RθJA RθJL	30 11							°C/W
Operating Junction and Storage Temperature Range	T_J , TSTG	-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

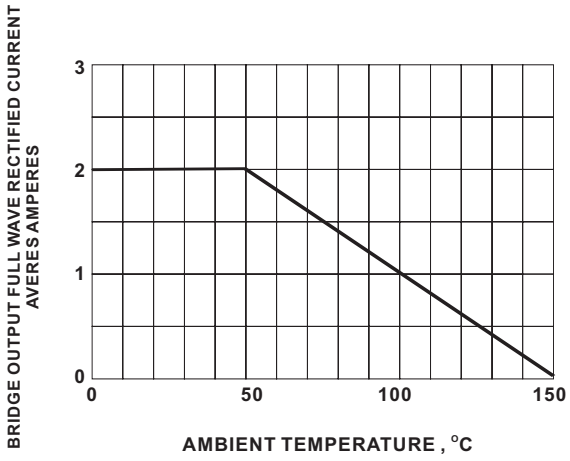


Fig.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

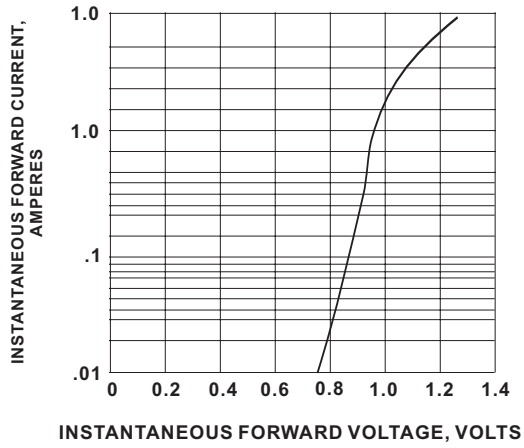


Fig.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

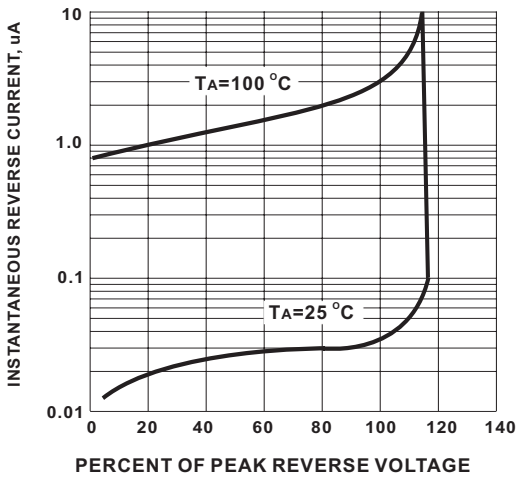


Fig.3 TYPICAL PEAK REVERSE CHARACTERISTICS

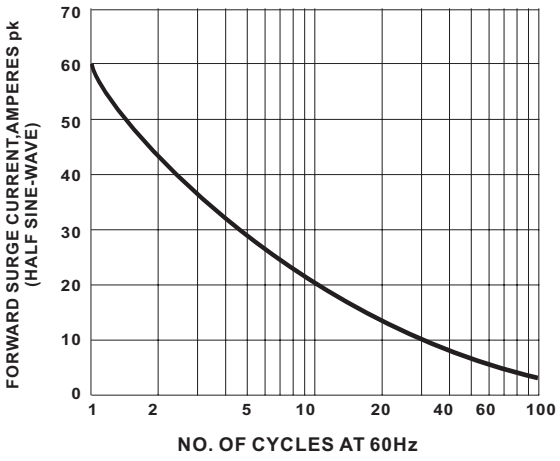


Fig.4 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT