YEA SHIN TECHNOLOGY CO., LTD

KBP005 THRU KBP10

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE-50 to 1000 Volts CURRENT-2.0 Amperes

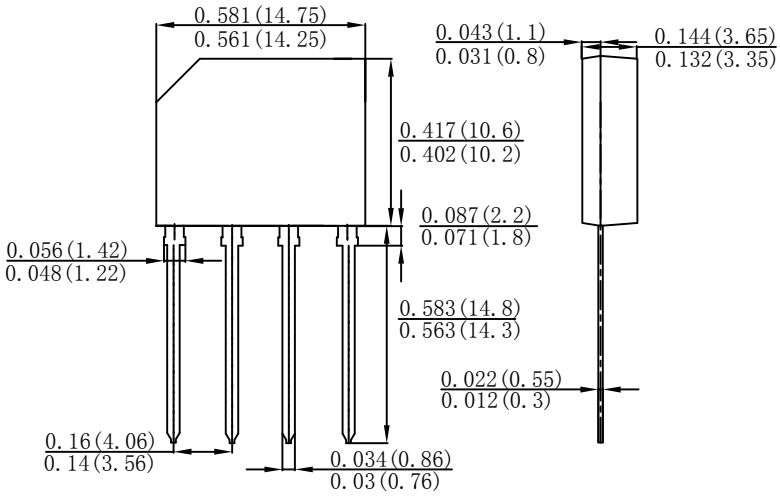
FEATURES

- Ideal for printed circuit board
- Surge overload rating: 50 Amperes peak
- High temperature soldering : 260^{O}C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MECHANICAL DATA

- Case:Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: MIL-STD-202E,Method 208 guaranteed
- Polarity: Symbols molded or marked on body
- Mounting position: Any

KBP



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25 ℃ ambient temperature unless otherwise specified.
- Single phase, half wave, 60 Hz, resistive or inductive load.
- For capacitive load, derate current by 20%.

		SYMBOL	KBP005	KBP01	KBP02	KBP04	KBP06	KBP08	KBP10	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 TA = 50℃		Io	2.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	50							A
Maximum Forward Voltage Drop per element at 1.0A DC		VF	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	**@TA = 25℃**	IR	5							uA
	@TA = 100℃		500							
I^2t Rating for Fusing(t<8.3ms)		I^2t	10.378							A^2S
Typical Junction Capacitance(Note1)		CJ	15							pF
Operating Temperature Range		TJ	-55 to + 150							℃
Storage Temperature Range		TSTG	-55 to + 150							℃

NOTES: 1.Measured at 1MHz 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 0.47x0.47"(12x12mm) copper pads.

DEVICE CHARACTERISTICS

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FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

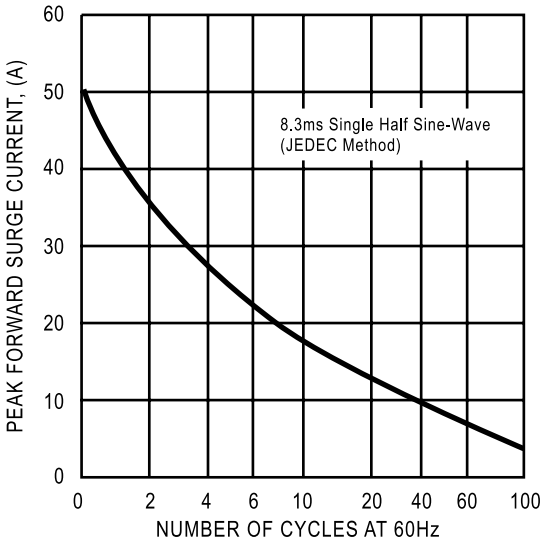

FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

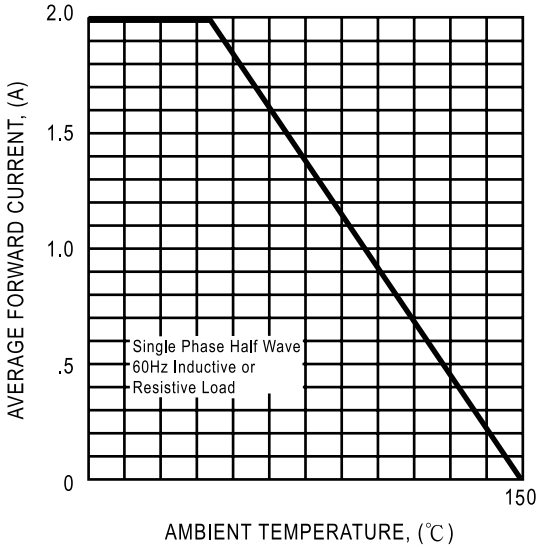

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

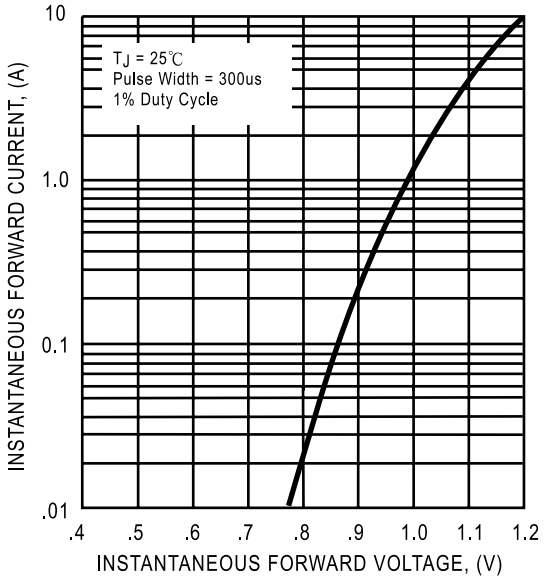

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS