

## 2KBP005 - 2KBP10

PRV : 50 - 1000 Volts

Io : 2.0 Amperes

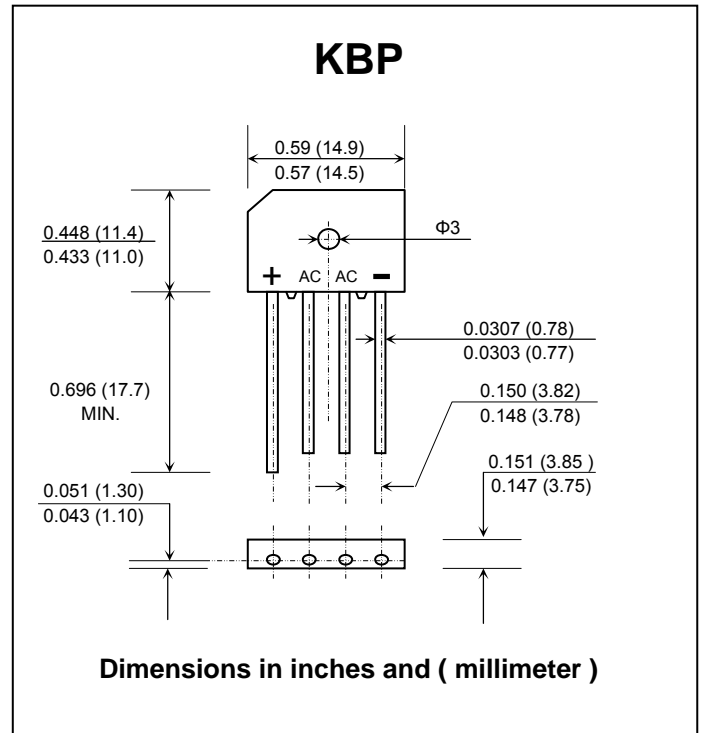
### FEATURES :

- \* High case dielectric strength
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Ideal for printed circuit board
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Terminals : Plated lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Polarity symbols marked on case
- \* Mounting position : Any
- \* Weight : 3.4 grams

## SILICON BRIDGE RECTIFIERS



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified  
Single phase, half wave, 60 Hz, resistive or inductive load  
For capacitive load, derate current by 20%

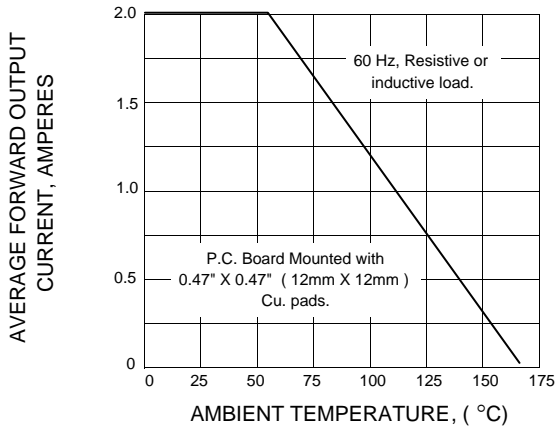
RATING	SYMBOL	2KBP 005	2KBP 01	2KBP 02	2KBP 04	2KBP 06	2KBP 08	2KBP 10	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Current Ta= 55°C	IF(AV)	2.0							A
Peak Forward Surge Current, Single sine wave Superimposed on rated load (JEDEC Method)	IFSM	60							A
Rating for fusing ( t < 8.3 ms. )	I <sup>2</sup> t	15							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage drop at IF = 1.0 A, TJ=25°C	VF	1.0							V
Maximum DC Reverse Current Ta= 25 °C	IR	10							µA
at Rated DC Blocking Voltage per element Ta= 125 °C	IR(H)	500							µA
Typical Junction Capacitance per element (Note 1)	CJ	25							pF
Typical Thermal Resistance (Note 2)	RθJA	30							°C/W
Operating Junction Temperature Range	TJ	- 50 to + 165							°C
Storage Temperature Range	TSTG	- 50 to + 165							°C

### Notes :

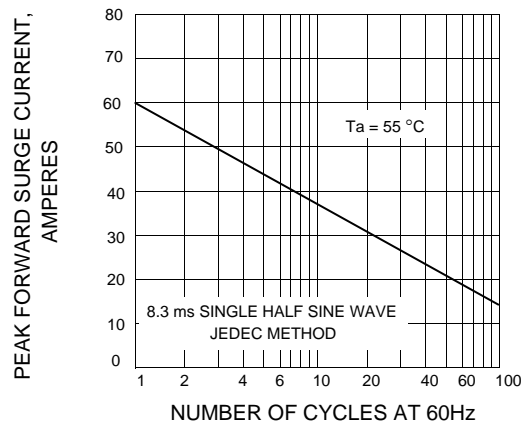
- 1 ) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
- 2 ) Thermal resistance from Junction to Ambient with units mounted on a 0.47" X 0.47" ( 12mm X 12mm ) Cu. Pads.

**RATING AND CHARACTERISTIC CURVES ( 2KBP005 - 2KBP10 )**

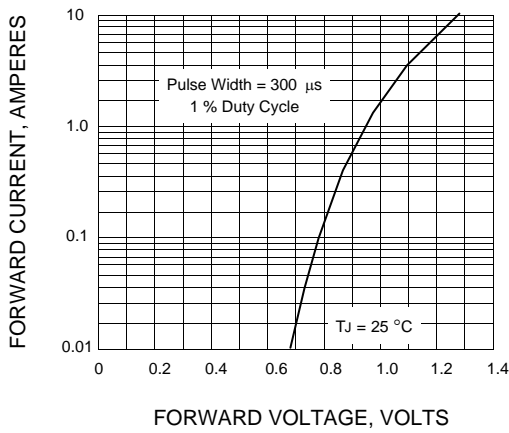
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



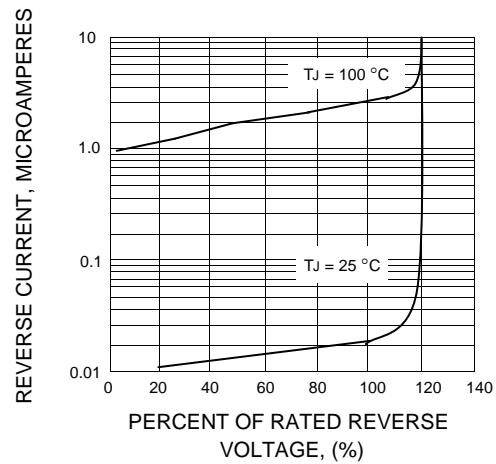
**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG.5 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT**

