

## SILICON BRIDGE RECTIFIERS

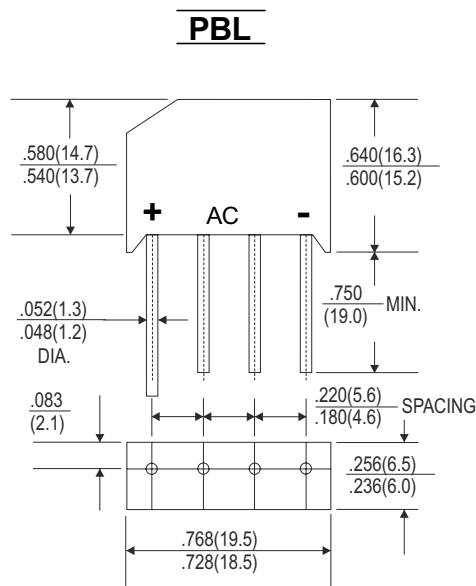
REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 4.0 Amperes

### FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- UL Recognition File # E228882

### MECHANICAL DATA

- Polarity : As marked on Body
- Weight : 0.08 ounces, 2.3 grams
- Mounting position : Any



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS	SYMBOL	PBL 401	PBL 402	PBL 403	PBL 404	PBL 405	PBL 406	PBL 407	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS 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 Rectified Current @T <sub>c</sub> =100°C (with heatsink Note 2) (without heatsink)	I <sub>(AV)</sub>					4.0			A
						2.6			
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I <sub>FSM</sub>					150			A
Maximum forward Voltage at 4.0A DC	V <sub>F</sub>					1.1			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C	I <sub>R</sub>					5 500			uA
I <sup>2</sup> t Rating for fusing (t < 8.3ms)	I <sup>2</sup> t					93			A <sup>2</sup> S
Typical Junction Capacitance per element (Note 1)	C <sub>J</sub>					45			pF
Typical Thermal Resistance (Note 2)	R <sub>θJC</sub>					2.2			°C/W
Operating Temperature Range	T <sub>J</sub>					-55 to +150			°C
Storage Temperature Range	T <sub>STG</sub>					-55 to +150			°C

NOTE : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2.Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

### RATING AND CHARACTERISTIC CURVES

