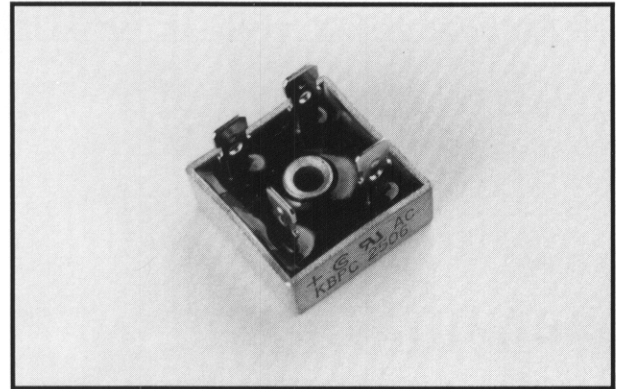




# KBPC25005 Thru KBPC2510

## 25 AMP SILICON BRIDGE RECTIFIER



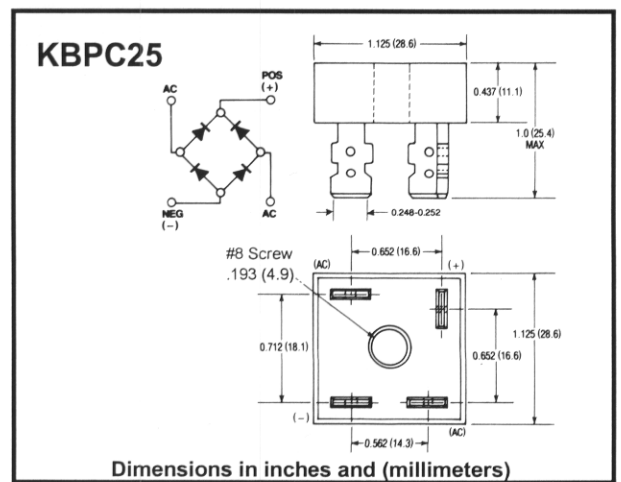
### FEATURES

- Rating to 1000V PRV
- 300 Amperes surge capability
- High efficiency
- Electrically isolated metal case for maximum heat dissipation
- UL recognized: File #E106441

### Mechanical Data

- Case: Metal
- Mounting: Through hole for #8 screw
- Weight: 1.1 ounce, 31.6 grams

### Outline Drawing



### Maximum Ratings & 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%

		KBPC 25005	KBPC 2501	KBPC 2502	KBPC 2504	KBPC 2506	KBPC 2508	KBPC 2510	Units
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 Output Current @ T <sub>C</sub> = 55°C	I <sub>(AV)</sub>	25.0							A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC Method)	I <sub>FSM</sub>	300							A
Maximum Forward Voltage Drop per Bridge Element At 12.5A DC	V <sub>F</sub>	1.2							V
Maximum DC Reverse Current At Rated@ T <sub>A</sub> = 25°C	I <sub>R</sub>	10							μA
Blocking Voltage per Bridge Element @ T <sub>A</sub> = 100°C		1							mA
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	373							A <sup>2</sup> S
Typical Thermal Resistance (Note 1)	R <sub>THJC</sub>	2.5							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

Note: 1. Mounted on a 11.8 in<sup>2</sup> X 0.06 in thick (300mm<sup>2</sup> X 1.5mm thick) copper plate