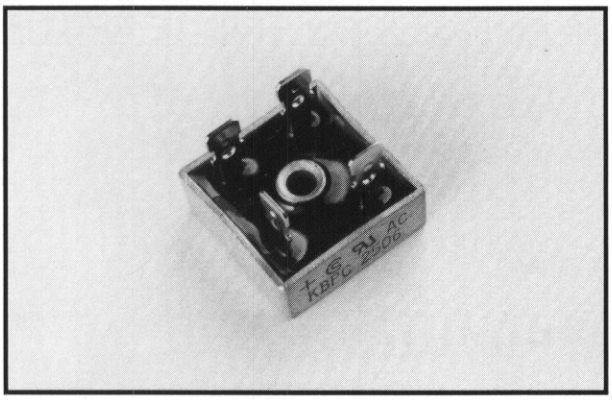
KBPC25005 Thru KBPC2510

25 AMP SILICON BRIDGE RECTIFIER



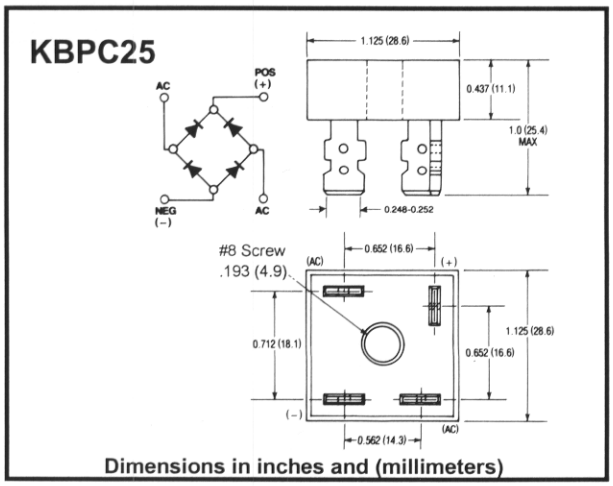
FEATURES

- 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



Dimensions in inches and (millimeters)

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_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS 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 @ T_C = 55°C Output Current	$I_{(AV)}$	25.0							A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC Method)	I_{FSM}	300							A
Maximum Forward Voltage Drop per Bridge Element At 12.5A DC	V_F	1.2							V
Maximum DC Reverse Current At Rated@ T_A = 25°C Blocking Voltage per Bridge Element @ T_A = 100°C	I_R	10 1							µA mA
I^2t Rating for Fusing (t < 8.3ms)	I^2t	373							A^2S
Typical Thermal Resistance (Note 1)	R_{THJC}	2.5							°C/W
Operating Temperature Range	T_J	-55 to +125							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

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