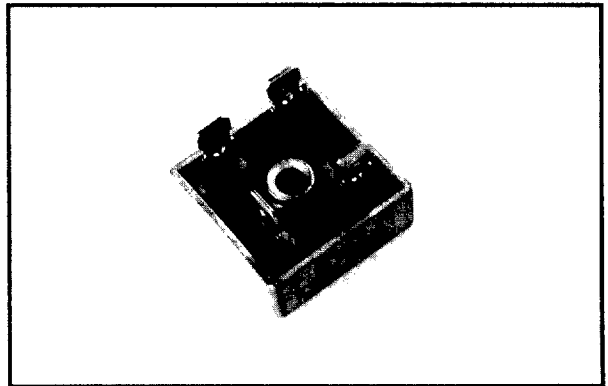
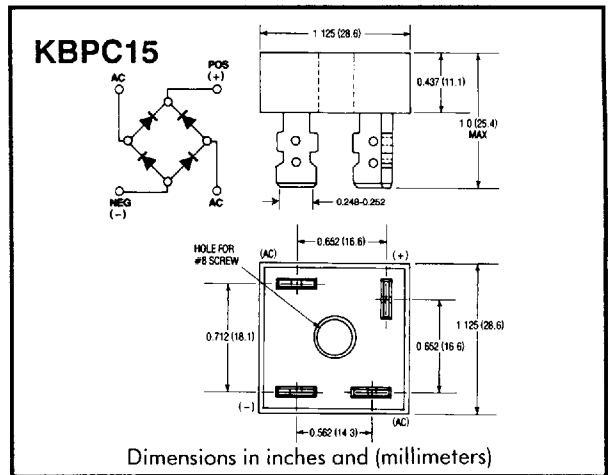


# KBPC25005 Thru KBPC2510

## 15 AMP SILICON BRIDGE RECTIFIER



### Outline Drawing



### 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

### 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 Output Current @ $T_C = 55^\circ C$	$I_{(AV)}$	25							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 7.5A DC	$V_F$	1.2							V
Maximum DC Reverse Current At Rated @ $T_A = 25^\circ C$	$I_R$	10							$\mu A$
Blocking Voltage per Bridge Element @ $T_A = 100^\circ C$		1							mA
$I^2 t$ Rating for Fusing ( $t < 8.3ms$ )	$I^2 t$	373							$A^2 S$
Typical Thermal Resistance (Note 1)	$R_{THJC}$	2.5							$^\circ C/W$
Operating Temperature Range	$T_J$	-55 to +125							$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ C$

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