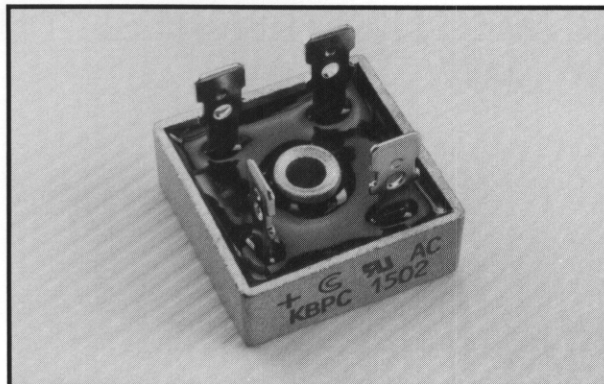


# KBPC15005 Thru KBPC1510



## 15 AMP SILICON BRIDGE RECTIFIER



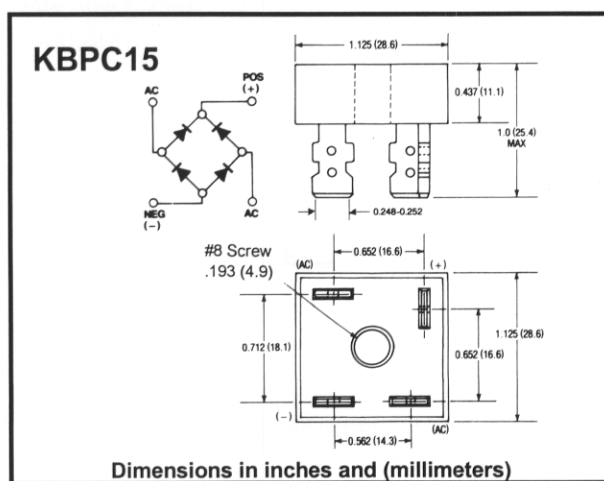
### FEATURES

- Rating to 1000V PRV
- 300 Amperes surge capability
- High efficiency
- Electrically isolated metal case for maximum heat dissipation
- UL recognized: File #E95060

### 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 15005	KBPC 1501	KBPC 1502	KBPC 1504	KBPC 1506	KBPC 1508	KBPC 1510	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 @ $T_C = 55^\circ\text{C}$	$I_{(AV)}$	15.0							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 7.5A DC	$V_F$	1.2							V
Maximum DC Reverse Current At Rated Blocking Voltage per Bridge Element @ $T_A = 100^\circ\text{C}$	$I_R$	10 1							$\mu\text{A}$ mA
$I^2 t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2 t$	373							$\text{A}^2\text{S}$
Typical Thermal Resistance (Note 1)	$R_{THJC}$	2.5							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

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