

# RKBPC15005 Thru RKBPC1510



## 15 AMP FAST RECOVERY BRIDGE RECTIFIER

### FEATURES

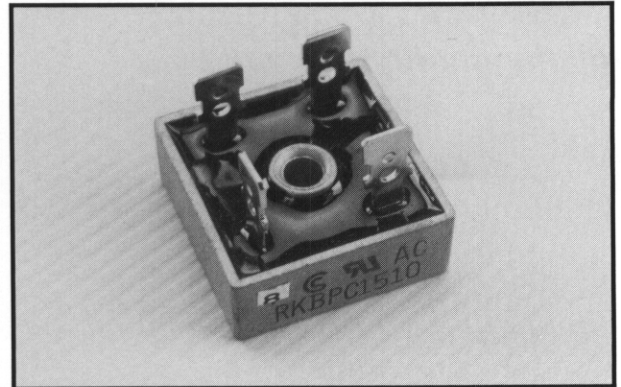
- Rating to 1000V PRV
- High efficiency
- 300 Amperes surge capability
- Electrically isolated metal case for maximum heat dissipation
- UL recognized: File #E160441

### Mechanical Data

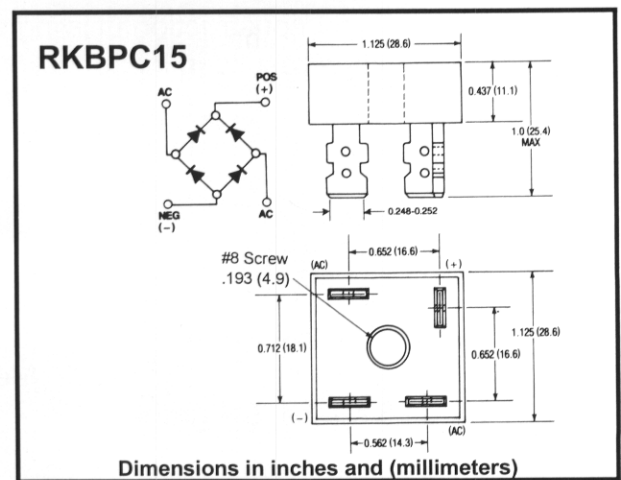
- Case: Metal
- Mounting: through hole for #8 screw
- Weight: 1.1 ounce, 31.6 grams

### 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%



### Outline Drawing



		RKBPC 15005	RKBPC 1501	RKBPC 1502	RKBPC 1504	RKBPC 1506	RKBPC 1508	RKBPC 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 @ $T_C = 55^\circ\text{C}$ Output Current	$I_{(AV)}$	15.0							A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load	$I_{FSM}$	300							A
Maximum DC Forward Voltage Drop per Element At 7.5A DC	$V_F$	1.3							V
Maximum Reverse Current At Rated @ $T_A = 25^\circ\text{C}$ DC Blocking Voltage per Element @ $T_A = 100^\circ\text{C}$	$I_R$	10 1							$\mu\text{A}$ mA
Maximum Recovery Time (Note 1)	$t_{rr}$	200				300	500		nS
$I^2 t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2 t$	373							$\text{A}^2 \text{S}$
Typical Thermal Resistance (Note 2)	$R_{THJA}$	2.5							$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

Note: 1. Measured with  $I_F = 0.5\text{A}$ ,  $I_R = -1\text{A}$ ,  $I_{RR} = -0.25\text{A}$   
 2. Mounted on 11.8 in<sup>2</sup> X 0.06 in thick (300mm<sup>2</sup> X 1.5mm thick) copper plate