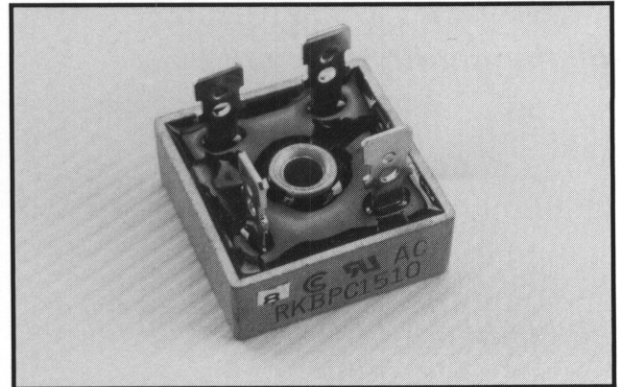


RKBPC15005 Thru RKBPC1510



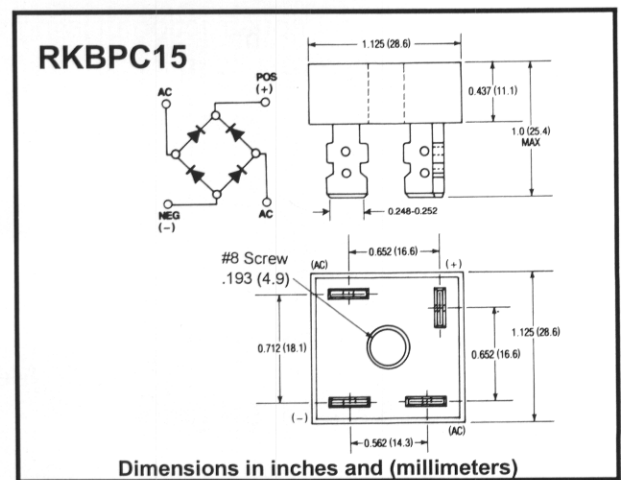
15 AMP FAST RECOVERY BRIDGE RECTIFIER



FEATURES

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

Outline Drawing



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%

		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							μA 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 in² X 0.06 in thick (300mm² X 1.5mm thick) copper plate