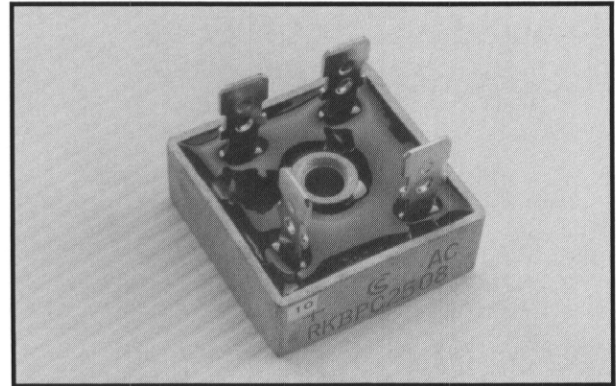




RKBPC25005 Thru RKBPC2510

25 AMP FAST RECOVERY BRIDGE RECTIFIER



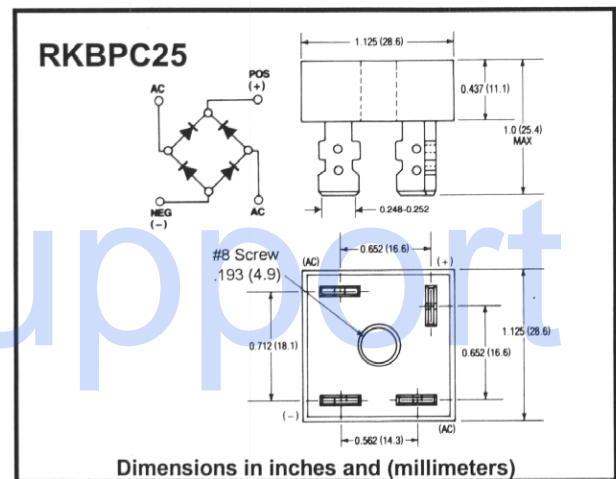
FEATURES

- 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

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%

		RKBPC 25005	RKBPC 2501	RKBPC 2502	RKBPC 2504	RKBPC 2506	RKBPC 2508	RKBPC 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°C	I _(AV)	25.0							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 DC Blocking Voltage per Element @ T _A = 25°C @ T _A = 100°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 < 8.3ms)	I ² t	373							A ² S
Typical Thermal Resistance (Note 2)	R _{THJA}	2.5							°C/W
Operating Temperature Range	T _J	-55 to +125							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

- Note: 1. Measured with I_F = 0.5A, I_R = -1A, I_{RR} = -0.25A
2. Mounted on 11.8 in² X 0.06 in thick (300mm² X 1.5mm thick) copper plate