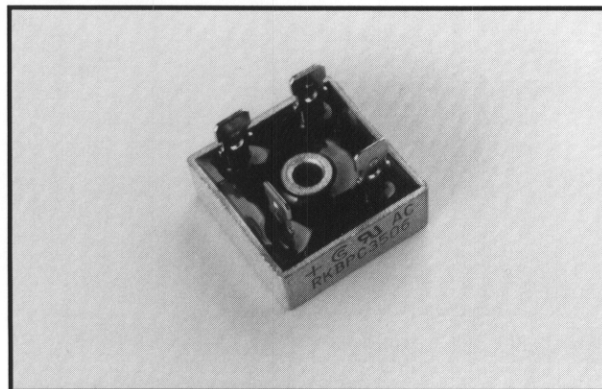


# RKBPC35005 Thru RKBPC3510



## 35 AMP FAST RECOVERY BRIDGE RECTIFIER



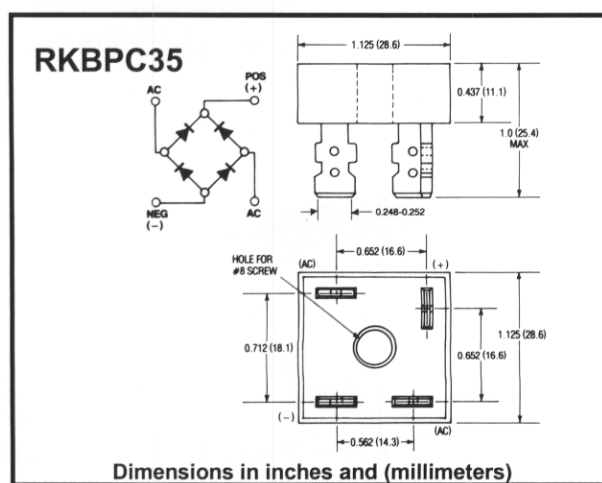
### FEATURES

- Rating to 1000V PRV
- High efficiency
- 400 Amperes surge capability
- 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

### 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 35005	RKBPC 3501	RKBPC 3502	RKBPC 3504	RKBPC 3506	RKBPC 3508	RKBPC 3510	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 @ $T_C = 55^\circ C$	$I_{(AV)}$	35.0							A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load	$I_{FSM}$	400							A
Maximum DC Forward Voltage Drop per Element At 17.5A DC	$V_F$	1.3							V
Maximum Reverse Current At Rated DC Blocking Voltage per Element	$I_R$	10 1							$\mu A$ mA
Maximum Recovery Time (Note 1)	$t_{rr}$	200			300		500		nS
$I^2 t$ Rating for Fusing ( $t < 8.3ms$ )	$I^2 t$	664							A <sup>2</sup> 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. Reverse recovery test conditions:  $I_F = 0.5A$ ,  $I_R = -1.0A$ ,  $I_{RR} = -0.25A$   
 2. Mounted on 11.8 in<sup>2</sup> X 0.06 in thick (300mm<sup>2</sup> X 1.5mm thick) copper plate