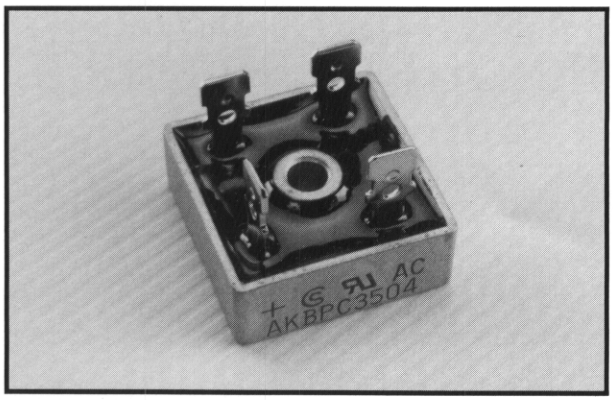
AKBPC3502 Thru AKBPC3508

35 AMP CONTROLLED AVALANCHE SILICON BRIDGE RECTIFIER



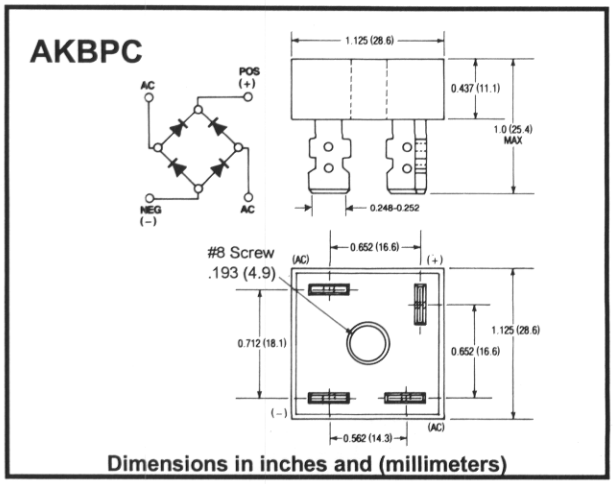
FEATURES

- Controlled avalanche series with 250V, 450V, 650V & 850V minimum avalanche ratings
- 400A surge capability
- High efficiency
- Electrically isolated metal case for maximum heat dissipation
- UL recognized: File #E106441

Mechanical Data

- Mounting: Through hole for #8 screw
- Weight: 1.1 ounce, 31.6 grams

Outline Drawing



Dimensions in inches and (millimeters)

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%

		AKBPC 3502	AKBPC 3504	AKBPC 3506	AKBPC 3508	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	V
Maximum RMS Input Voltage	V_{RMS}	140	280	420	560	V
Minimum Avalanche Breakdown Voltage at 100μA	$V_{(BR)}$	250	450	650	850	V
Maximum Avalanche Breakdown Voltage at 100μA	$V_{(BR)}$	700	900	1100	1300	V
Maximum Average Forward Output Current @ T_C = 55°C	$I_{(AV)}$	35.0				A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC Method)	I_{FSM}	400				A
MaximumForward Voltage Drop per Bridge Element At 17.5 A, DC	V_F	1.2				V
Maximum DC Reverse Current At Rated @ T_A = 25°C	I_R	10				μA
DC Blocking Voltage per Bridge Element @ T_A = 100°C		1.0				mA
I^2t Rating for fusing (t < 8.3ms)	I^2t	660				A^2S
Typical Thermal Resistance (Note 1)	R_{THJC}	2.5				°C/W
Operating Temperature Range	T_J	-55 to +125				°C
Storage Temperature Range	T_{STG}	-55 to +150				°C

Note: 1. Mounted on a 11.8^2 in. X 0.06 in. thick ($300mm^2$ X 1.5mm thick) copper plate.