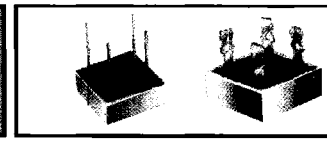
AKBPC2502 thru 2508

25 AMPS. CONTROLLED AVALANCHE SILICON BRIDGE RECTIFIERS

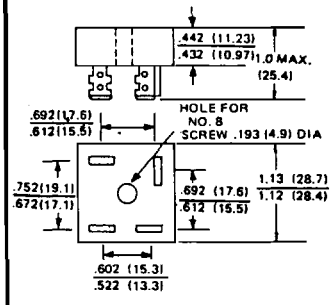


VOLTAGE RANGE
200 to 800 Volts
CURRENT
25 Amperes

FEATURES

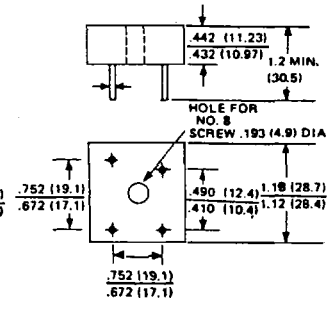
- Controlled Avalanche Series with 250V, 450V, 650V, and 850V minimum Avalanche Ratings
- 300 amperes surge capability
- High efficiency
- Electrically isolated metal case for maximum heat dissipation
- Weight: 1.1 ounce 31.6 grams (Terminal)
  0.95 ounce 28.5 grams (Wire)
- Mounting: thru hole for # 8 screw
- UL Recognized file # E95060

KBPC



Terminal

KBPC-W



Wire

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL 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 25-02 AKBPC 25-02W	AKBPC 25-04 AKBPC 25-04W	AKBPC 25-06 AKBPC 25-06W	AKBPC 25-08 AKBPC 25-08W	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 Avalance Breakdown Voltage at 100 μA		250	450	650	850	V
Maximum Avalance Breakdown Voltage at 100 μA		700	900	1100	1300	V
Maximum Average Forward Output Current @T_C = 55° C	$I_{(AV)}$	25				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave superimposed on Rated Load (JEDEC Method)	I_{FSM}	300				A
Maximum Forward Voltage per Bridge Element at 12.5A, DC	V_F	1.2				V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Bridge Element @T_A = 25° C @T_A = 100° C	I_R	10 1				uA mA
I^2t Rating for fusing (t < 8.3ms)	I^2t	373				A^2S
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	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 in X0.06 in thick (300mm² X1.5mm thick) Copper plate.

LITEON

FIG. 1. FORWARD DERATING CURVE

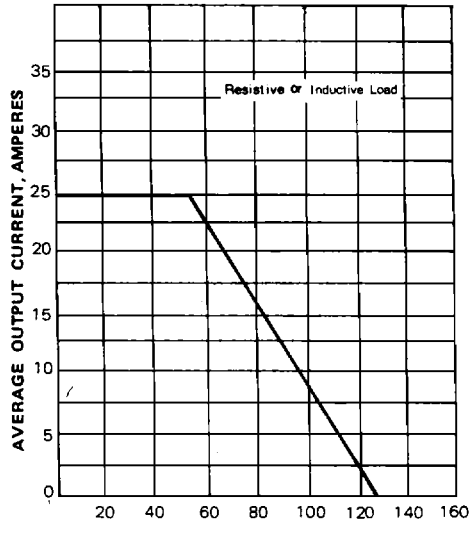


FIG. 2. PEAK FORWARD SURGE CURRENT

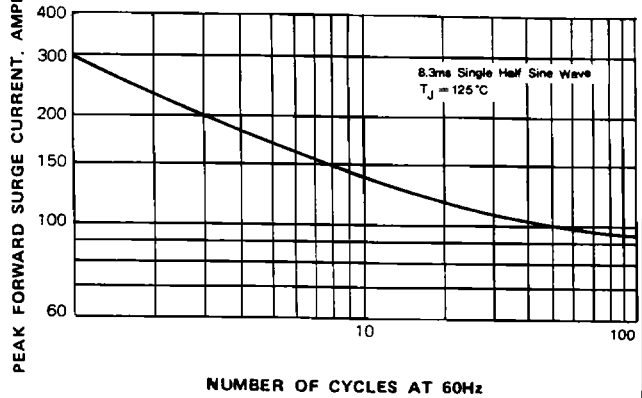


FIG.3 TYPICAL FORWARD CHARACTERISTIC

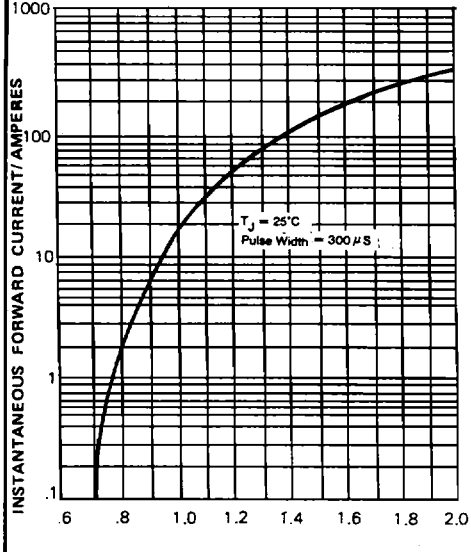


FIG. 4. TYPICAL REVERSE CHARACTERISTIC