

KBPC15005/MB1505 THRU KBPC1510/MB1510

SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE: 50-1000V

CURRENT: 15.0A

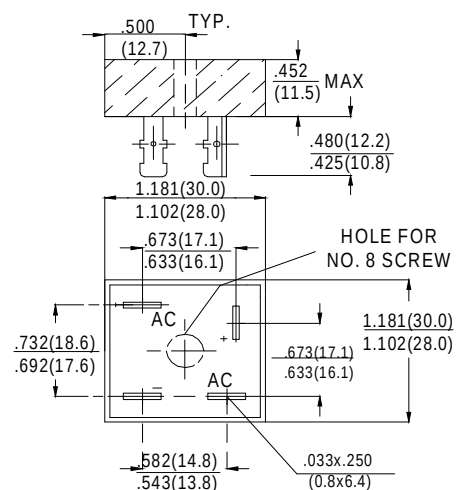
FEATURES

- Metal case for Maximum Heat Dissipation
- Surge overload ratings-300 Amperes
- Low forward voltage drop

MECHANICAL DATA

- **Case:** Metal shell with plastic encapsulation
- **Epoxy:** UL 94V-0 rate flame retardant
- **Terminals:** Plated .25"(6.35mm) Faston lugs, Solderable per MIL-STD-202E, Method 208 guaranteed
- **Polarity:** As marked
- **Mounting:** Thru hole for 8# screw
- **Weight:** 30 grams

MB-25



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%.

		SYMBOL	KBPC 15005	KBPC 1501	KBPC 1502	KBPC 1504	KBPC 1506	KBPC 1508	KBPC 1510	units
			MB1505	MB151	MB152	MB154	MB156	MB158	MB1510	
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 rectified Output Current at T _C =55°C		I_o	15.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)		I_{FSM}	300							A
Maximum Forward Voltage Drop per element at 7.5A DC		V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@ T _A =25°C	I_R	10							µA
	@ T _A =100°C		500							
I ² t Rating for Fusing (t<8.3ms)		I²t	374							A²S
Typical Junction Capacitance (Note 1)		C_J	40							pF
Typical Thermal Resistance (Note 2)		R_{θJA}	19							°C/W

Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance from Junction to Ambient and from junction to lead mounted on P.B.C. with 0.47×0.47"(12×12mm) copper pads