

KBPC1510

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 15 Amperes

FEATURES

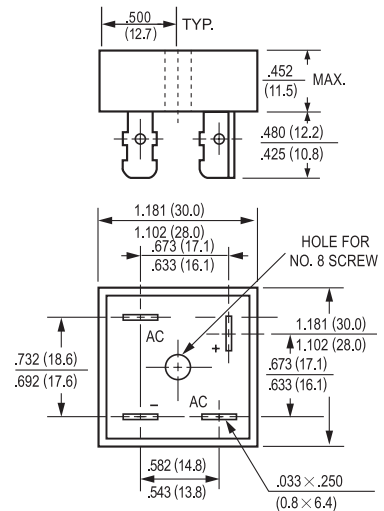
- * Metal case for Maximum Heat Dissipation
- * Surge overload ratings-300 Amperes
- * Low forward voltage drop

MECHANICAL DATA

- * Case: Metal case, electrically isolated
- * 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 position: Any
- * 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, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

		KBPC 15005	KBPC 1501	KBPC 1502	KBPC 1504	KBPC 1506	KBPC 1508	KBPC 1510	
	SYMBOL	MB1505	MB151	MB152	MB154	MB156	MB158	MB1510	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at $T_c = 55^\circ C$	I_O	15.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	300							Amps
Maximum Forward Voltage Drop per element at 7.5A DC	V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@ $T_A = 25^\circ C$	10							uAmps
	@ $T_C = 100^\circ C$	500							
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	374							A^2Sec
Typical Junction Capacitance (Note1)	C_J	40							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	19							$^\circ C/W$
Operating and Storage Temperature Range	$T_{J,TSTG}$	-55 to + 175							$^\circ C$

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

2. Thermal Resistance from Junction to Ambient and from junction to lead mounted on P.C.B. with 0.47 x 0.47" (12x12mm) copper pads.

RATING AND CHARACTERISTIC CURVES (KBPC15005 MB1505 THRU KBPC1510 MB1510)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

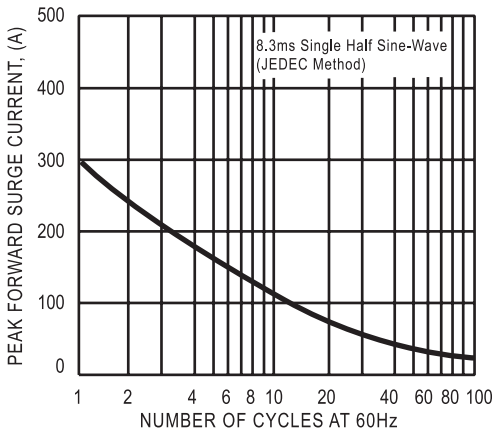


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

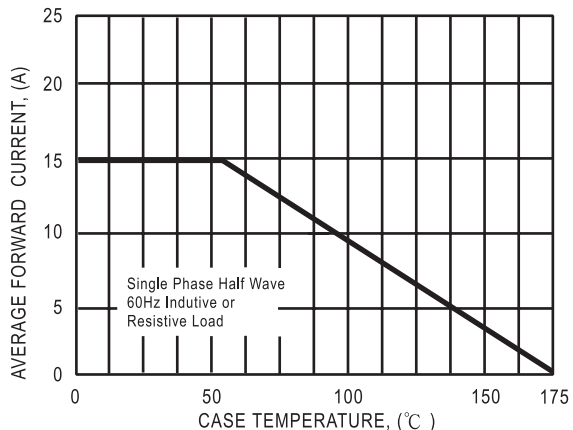


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

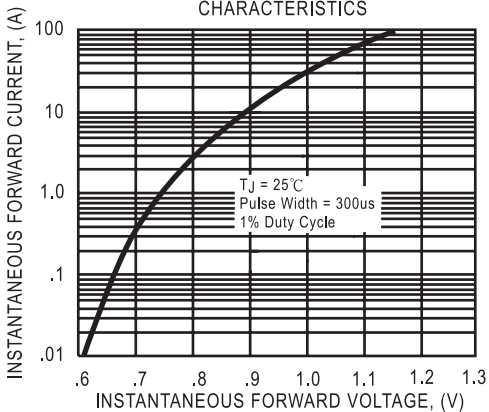


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

