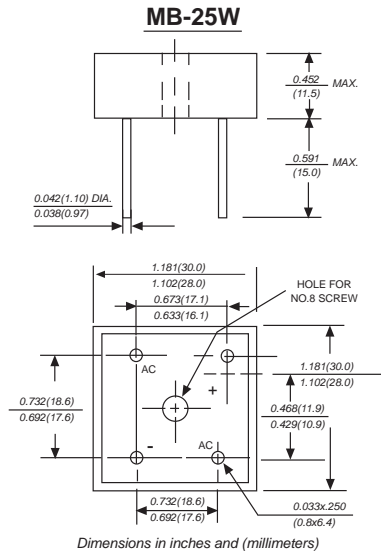


KBPC25005W THRU KBPC2510W AND MB2505W THRU MB2510W SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 25.0 Amperes



FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Ideal for printed circuit boards
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 260°C/10 seconds, at 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: Metal case

Terminals: Lead 0.040" (1.02mm) diameter.

Polarity: Polarity symbols marked on case

Mounting: Thru hole for #8 screw, 20in.-lbs. torque max.

Weight: 0.93 ounce, 26.4 grams

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 current derate by 20%.

	SYMBOLS	KBPC 25005W	KBPC 2501W	KBPC 2502W	KBPC 2504W	KBPC 2506W	KBPC 2508W	KBPC 2510W	UNITS
		MR2505W	MB251W	MB252W	MB254W	MB256W	MR258W	MB2510W	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS 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 output rectified current at $T_c=50^\circ\text{C}$ (Note 1,2)	$I_{(AV)}$	25							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300.0							Amps
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	373							A^2s
Maximum instantaneous forward voltage drop per bridge element at 12.5A	V_F	1.1							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	10							mA
		1.0							mA
Isolation voltage from case to leads	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 2)	R_{qJA}	2.0							$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-65 to +150							$^\circ\text{C}$
storage temperature range	T_{STG}	-65 to +150							$^\circ\text{C}$

NOTES:

1. Unit mounted on 5" x 6" x 4.9" thick (12.8cm x 15.2cm x 12.4cm) Al. plate.

2. Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #8 screw.