

# KBPC2510

## TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 25 Amperes

**FEATURES**

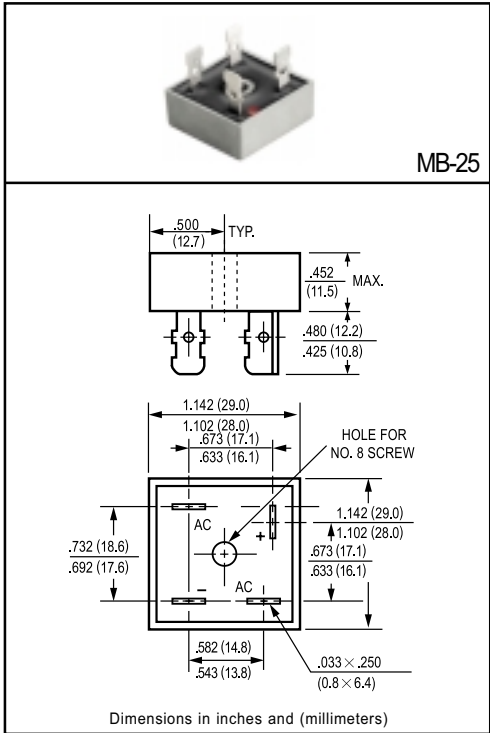
- \* Metal case for Maximum Heat Dissipation
- \* Surge overload ratings-400 Amperes
- \* Low forward voltage drop

**MECHANICAL DATA**

- \* Case: Metal, 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

**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 25005	KBPC 2501	KBPC 2502	KBPC 2504	KBPC 2506	KBPC 2508	KBPC 2510		
	SYMBOL	MB2505	MB251	MB252	MB254	MB256	MB258	MB2510	UNITS	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts	
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Output Current at T <sub>c</sub> = 55°C	I <sub>O</sub>					25				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>					400				Amps
Maximum Forward Voltage Drop per element at 12.5A DC	V <sub>F</sub>					1.1				Volts
Maximum DC Reverse Current at Rated	I <sub>R</sub>					10				uAmps
DC Blocking Voltage per element						500				
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t					374				A <sup>2</sup> Sec
Typical Junction Capacitance ( Note1)	C <sub>J</sub>					300				pF
Typical Thermal Resistance (Note 2)	R <sub>θJC</sub>					2.5				°C/W
Operating and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>					-55 to + 150				°C

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts  
 2. Thermal Resistance from Junction to Case per leg.

