



KBPC35005-KBPC3510

SINGLE-PHASE SILICON BRIDGE RECTIFIER

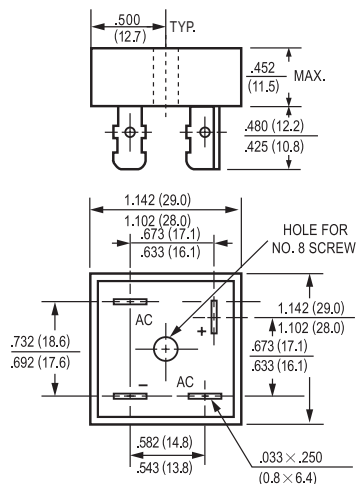
VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 35 Amperes

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

FEATURES

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



Dimensions in inches and (millimeters)

MB-25



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%.

PARAMETER		SYMBOL	KBPC35005 MB3505	KBPC3501 MB351	KBPC3502 MB352	KBPC3504 MB354	KBPC3506 MB356	KBPC3508 MB358	KBPC3510 MB3510	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 Current at T _C = 55℃		I _O	25							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave Superimposed on rated load (JEDEC Method)		I _{FSM}	400							Amps
Maximum Forward Voltage Drop per element at 17.5A DC		V _F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T _A = 25℃	I _R	10							uAmps
	@T _A = 100℃		500							
I ² t Rating for Fusing (t < 8.3ms)		I ² t	664							A ² Sec
Typical Junction Capacitance (Note 1)		C _J	300							pF
Typical Thermal Resistance (Note 2)		R θ _{Jc}	2.2							℃/W
Operating and Storage Temperature Range		T _J ,T _{STG}	-55 to +150							℃

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



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RATING AND CHARACTERISTIC CURVES

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

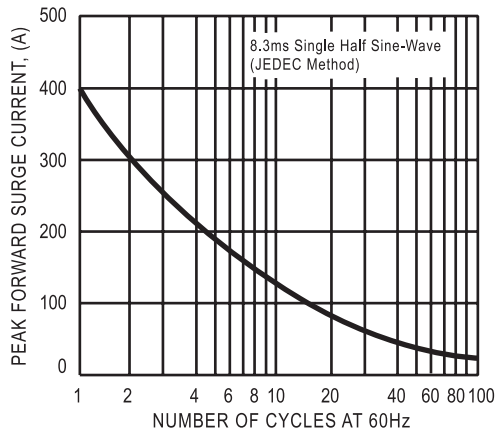


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

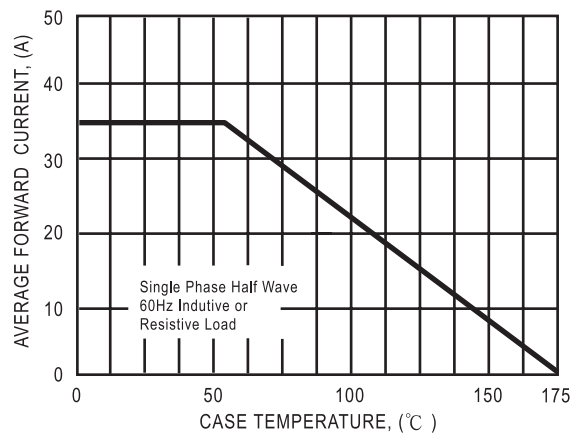


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

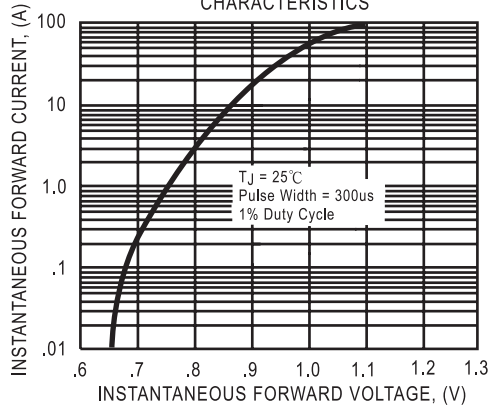


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

