



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

KBPC / MB
35005W / 3505W

THRU

KBPC / MB
3510W / 3510W

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 35 Amperes

FEATURES

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

MECHANICAL DATA

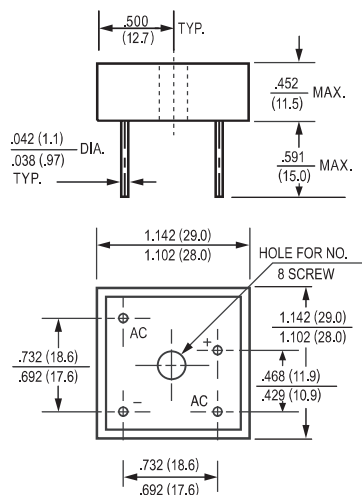
- * Case: Metal, electrically isolated
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 30 grams

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%.



MB-25W



Dimensions in inches and (millimeters)

		KBPC 35005W	KBPC 3501W	KBPC 3502W	KBPC 3504W	KBPC 3506W	KBPC 3508W	KBPC 3510W		
	SYMBOL	MB3505W	MB351W	MB352W	MB354W	MB356W	MB358W	MB3510W	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 Tc = 55°C	I _O	35							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	@ TA = 25°C	I _R	10							uAmps
DC Blocking Voltage per element	@ TA = 100°C		500							
I ² t Rating for Fusing (t<8,3ms)	I ² t	664							A ² Sec	
Typical Junction Capacitance (Note1)	C _J	300							pF	
Typical Thermal Resistance (Note 2)	R _{θJC}	2.2							°C/W	
Operating and Storage Temperature Range	T _J ,T _{STG}	-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.

Diode, Bridge
INDEX 0
Rectifiers

Diode, Bridge
INDEX 0
Rectifiers

Transistors,
INDEX 1
SCR, IC

Transistors,
INDEX 2
SCR, IC



RATING AND CHARACTERISTIC CURVES

(KBPC35005W MB3505W THRU KBPC3510W MB3510W)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

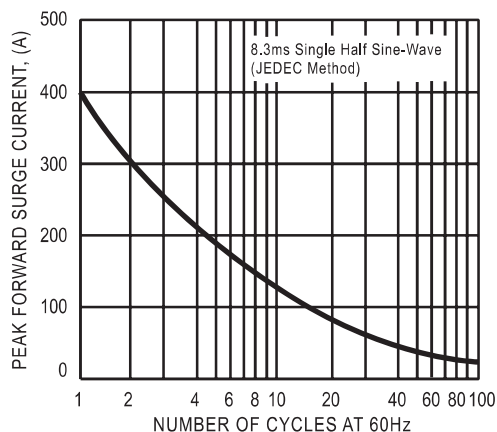


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

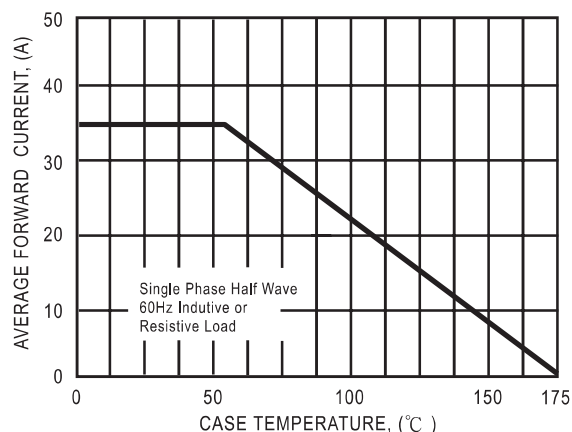


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

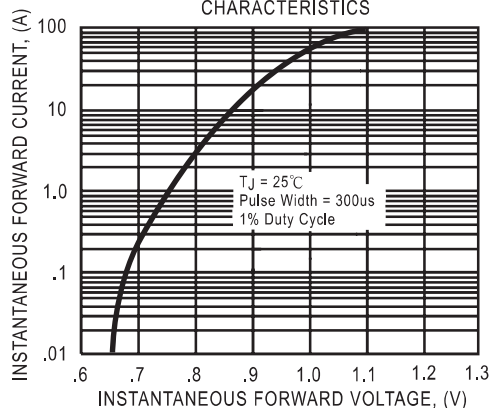
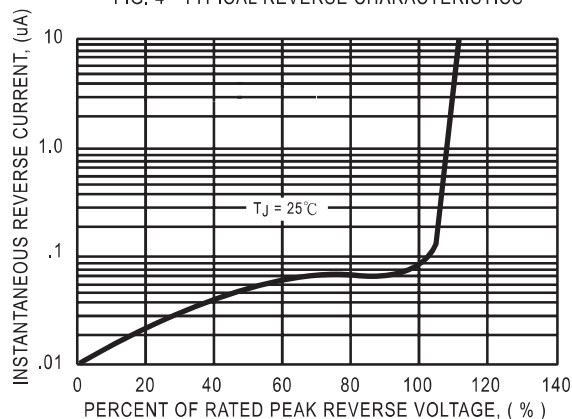


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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