



**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**

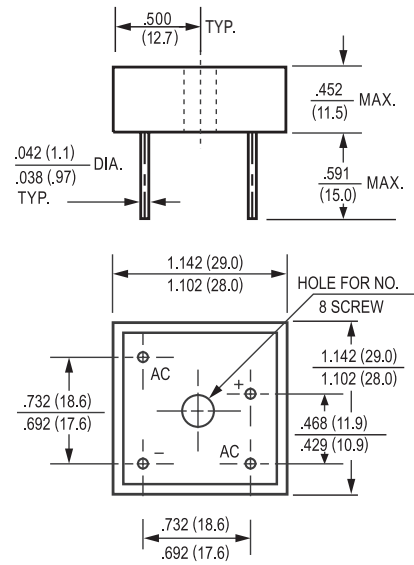
- \* Case: Metal, electrically isolated
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: As marked
- \* Mounting position: Any
- \* Weight: 30 grams

**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)

	SYMBOL	KBPC 35005W	KBPC 3501W	KBPC 3502W	KBPC 3504W	KBPC 3506W	KBPC 3508W	KBPC 3510W	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at Tc = 55°C	IO	35							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	400							Amps
Maximum Forward Voltage Drop per element at 17.5A DC	VF	1.1							Volts
Maximum DC Reverse Current at Rated	IR	10							uAmps
DC Blocking Voltage per element									
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	664							A <sup>2</sup> Sec
Typical Junction Capacitance ( Note1)	CJ	300							pF
Typical Thermal Resistance (Note 2)	RθJC	2.2							°C/W
Operating and Storage Temperature Range	TJ,TSTG	-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.

RATING AND CHARACTERISTIC CURVES

( KBPC35005W THRU KBPC3510W  
MB3505W MB3510W )

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

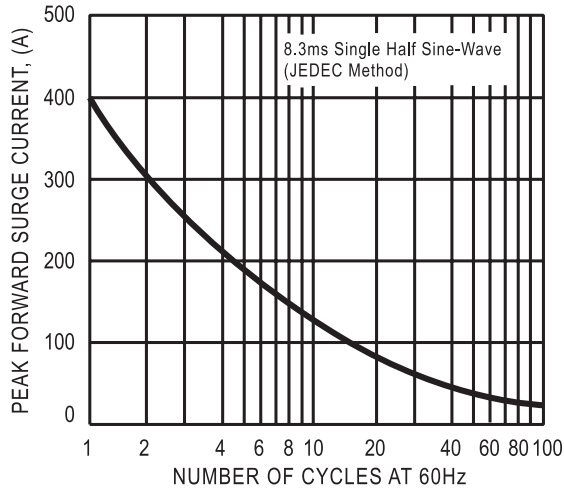


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

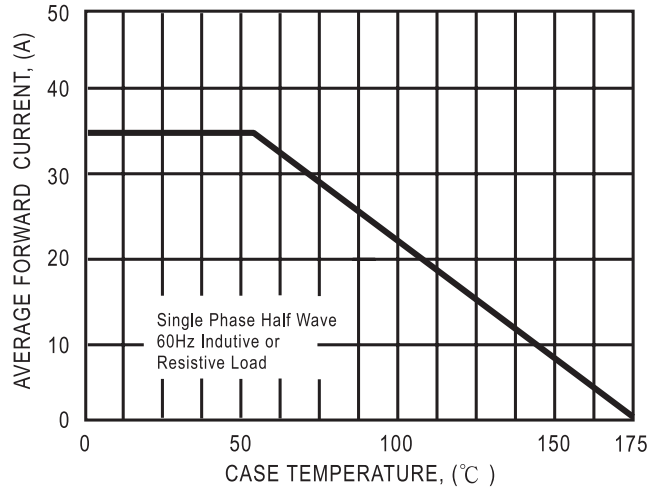


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

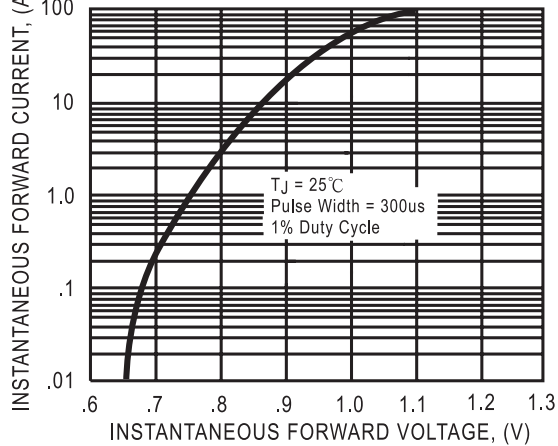


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

