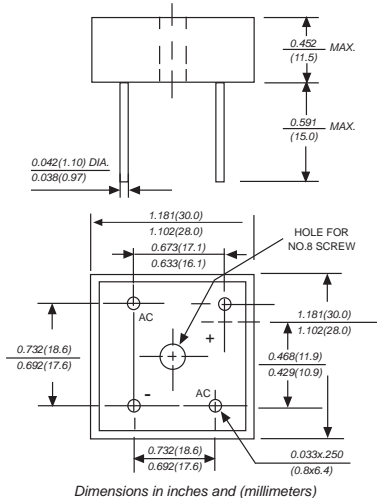


# KBPC35005W THRU KBPC3510W AND MB3505W THRU MB3510W SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts    Forward Current - 35.0 Amperes

## MB-35W



## 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 35005W MB3505W	KBPC 3501W MB351W	KBPC 3502W MB352W	KBPC 3504W MB354W	KBPC 3506W MB356W	KBPC 3508W MB358W	KBPC 3510W MB3510W	UNITS
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)	$I_{(AV)}$	35							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400.0							Amps
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	664							$\text{A}^2\text{s}$
Maximum instantaneous forward voltage drop per bridge element at 17.5A	$V_F$	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	10							mA
		1.0							mA
Isolation voltage from case to leads	$V_{ISO}$	2500							$V_{AC}$
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	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 9" x 3.5" x 4.6" thick (23cm x 9cm x 11.8cm) 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.