



## SINGLE-PHASE BRIDGE RECTIFIER

KBPC35005 THRU KBPC3510

VOLTAGE RANGE

50 to 1000 Volts

MB3505 THRU MB3510

CURRENT

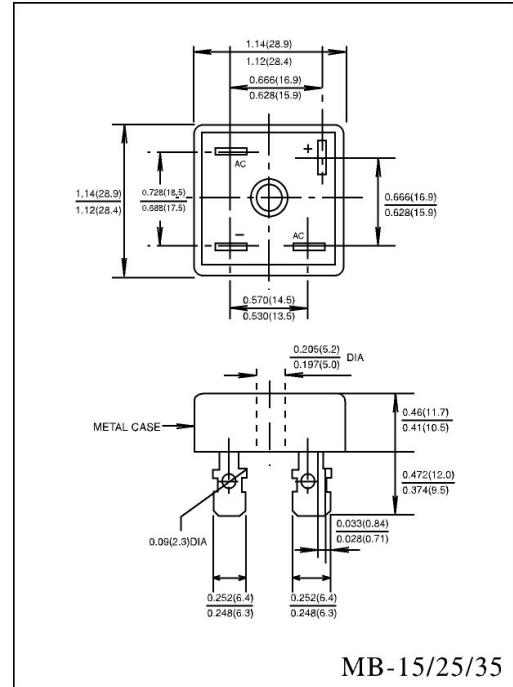
35 Ampere

### FEATURES

- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Integrally molded heatsink provide very low thermal resistance.
- High isolation voltage from case to lugs.
- High temperature soldering guaranteed: 260°C/10 second, at 5 lbs. (2.3kg) tension.

### MECHANICAL DATA

- Case: Metal case
- Terminal: Plated 0.25" (6.35mm) lug.
- Polarity: Polarity symbols marked on case.
- Mounting: Thru hole for #10 screw, 20 in.,- lbs. Torquite Max.
- Weight: 1.02 ounce, 29gram



### 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 derate current by 20%

	SYMBOLS	KBPC 35005	KBPC 3501	KBPC 3502	KBPC 3504	KBPC 3506	KBPC 3508	KBPC 3510	UNIT	
		MB3505	MB351	MB352	MB354	MB356	MB358	MB3510		
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts	
Maximum RMS 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> = 50°C (Note 1,2)	I <sub>(AV)</sub>	35							Amps	
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method )	I <sub>FSM</sub>	400							Amps	
Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	664							A <sup>2</sup> s	
Maximum Instantaneous Forward Voltage Drop per bridge element at 17.5A	V <sub>F</sub>	1.1							Volts	
Maximum DC Reverse Current at rate	T <sub>A</sub> = 25°C	I <sub>R</sub>	10							μ A
DC blocking voltage per element	T <sub>A</sub> = 100°C		1.0							mA
Isolation Voltage from case to lugs.	V <sub>ISO</sub>	2500							V <sub>AC</sub>	
Typical Thermal Resistance (Note 1,2)	R <sub>θJC</sub>	2.0							°C/W	
Operating Temperature Range	T <sub>J</sub>	(-65 to +150)							°C	
Storage Temperature Range	T <sub>STG</sub>	(-65 to +150)								

1. Unit mounted on 9" X 3.5" X 4.6" (23cm X 9cm X 11.8cm)Al. finned Plate.

2. Bolt down on heat-sink with silicon thermal compound between bridge and mounting sutfae for maximum heat transfer efficiency with # 10 screw.

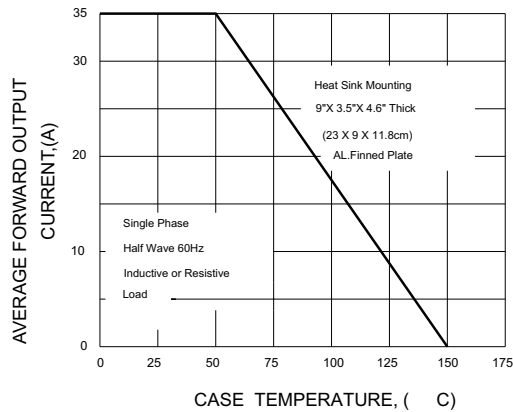
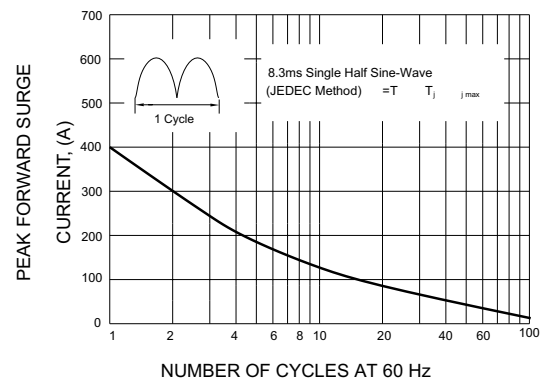
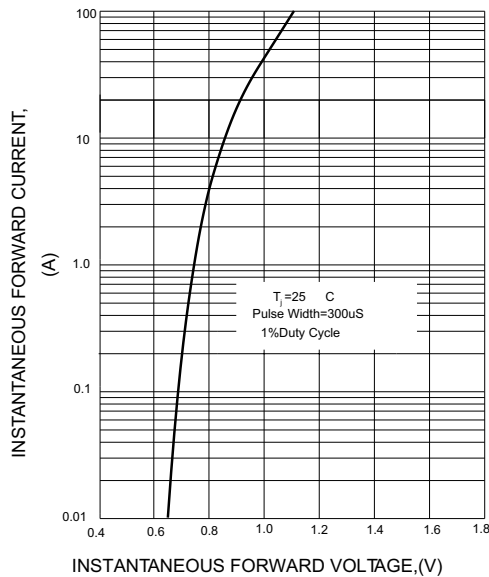
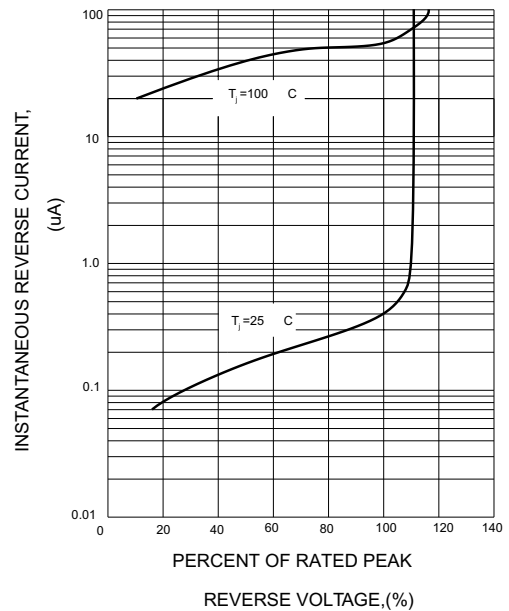
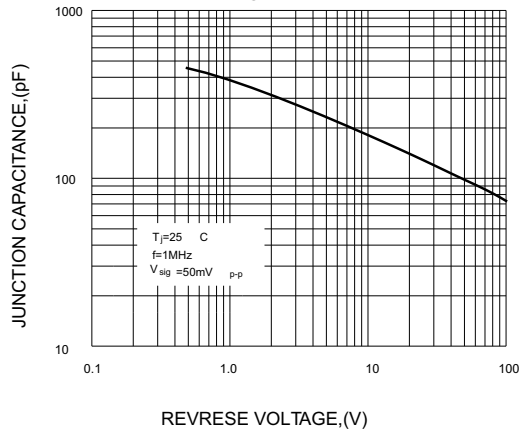
FIG.1-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENTFIG.2-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER ELEMENTFIG.3-TYPICAL FORWARD CHARACTERISTICS  
PER BRIDGE ELEMENTFIG.4-TYPICAL REVERSE CHARACTERISTICS  
PER BRIDGE ELEMENTFIG.5-TYPICAL JUNCTION CAPACITANCE  
PER BRIDGE ELEMENT

FIG.6-MAXIMUM POWER DISSIPATION

