



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F, EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.  
TEL: 2790-0314 FAX: 2790-0206



SINGLE-PHASE BRIDGE RECTIFIER

MB1505 THRU MB1510  
KBPC15005 THRU KBPC1510

VOLTAGE RANGE 50 to 1000 Volts  
CURRENT 15 Ampere

**FEATURES**

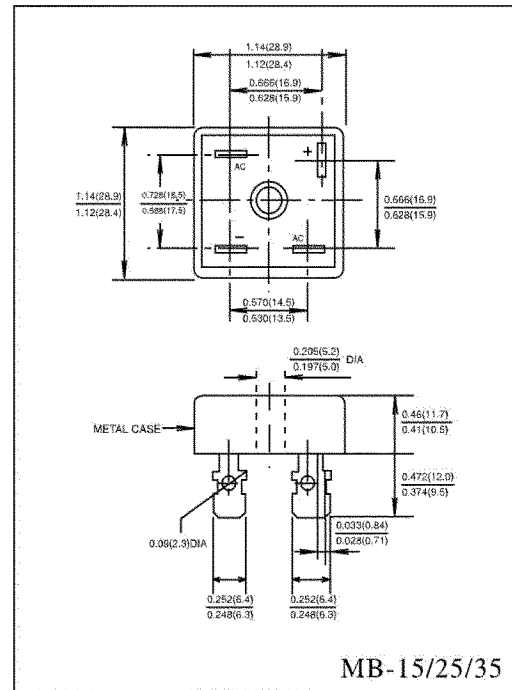
- Low cost
- This series is UL recognized under component index, file number E127707
- High overload surge current capability
- Low thermal resistance.
- High isolation voltage from case to lugs.
- High temperature soldering guaranteed: 260°C/10 second, at 5 lbs. (2.3kg) tension.

**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. Torqute Max.
- Weight: 1.02 ounce, 29 gram

**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	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	UNIT
		15005	1501	1502	1504	1506	1508	1510	
		MB1505	MB151	MB152	MB154	MB156	MB158	MB1510	
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 Rectified Output Current, at $T_C = 55^\circ C$ (Note 1, 2)	$I_{(AV)}$	15							Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method )	$I_{FSM}$	300							Amps
Rating for Fusing (t<8.3ms)	$I^2t$	373							$A^2s$
Maximum Instantaneous Forward Voltage Drop per bridge element at 7.5A	$V_F$	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	$T_A = 25^\circ C$	10							$\mu A$
	$T_A = 100^\circ C$	1.0							mA
Isolation Voltage from case to lugs	$V_{ISO}$	2500							$V_{AC}$
Typical Thermal Resistance (Note 1,2)	$R_{\theta JC}$	2.0							$^\circ C/W$
Operating Temperature Range	$T_J$	(-65 to +150)							$^\circ C$
Storage Temperature Range	$T_{STG}$	(-65 to +150)							

1. Unit mounted on 5" X 4" X 3" (12.8cm X 10.2cm X 7.3cm)Al. finned Plate.  
2. Bolt down on heat-sink with silicon thermal compound between bridge and mounting surface for maximum heat transfer efficiency with # 10 screw



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RATINGS AND CHARACTERISTIC CURVES

KBPC15005  
MB1505

THRU KBPC1510  
MB1510

FIG.1-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT

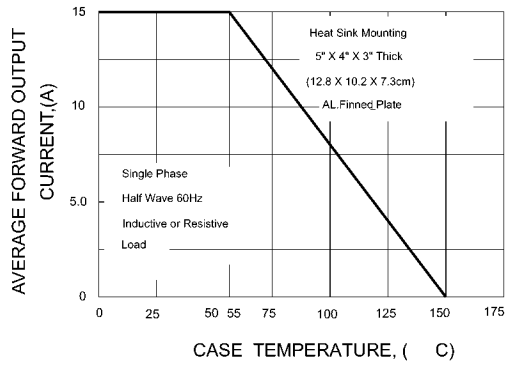


FIG.2-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER ELEMENT

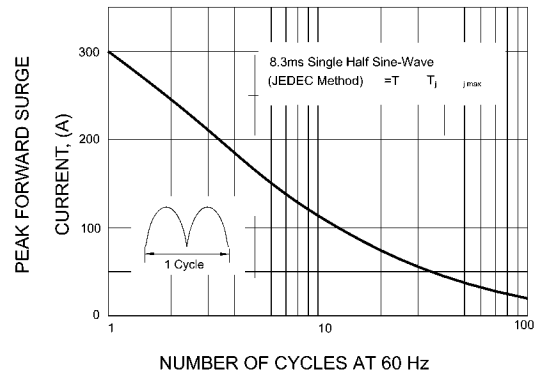


FIG.3-TYPICAL FORWARD CHARACTERISTICS  
PER BRIDGE ELEMENT

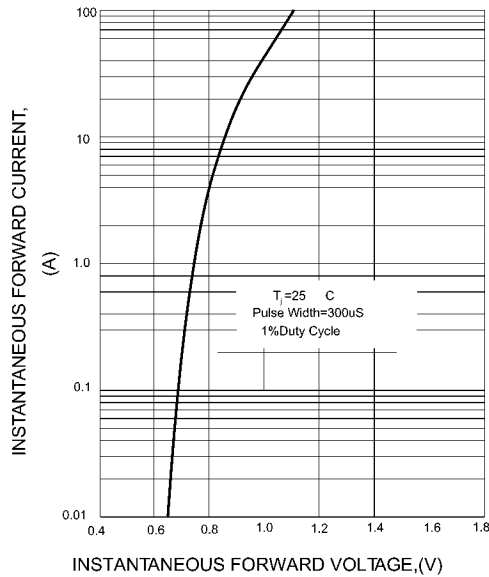


FIG.4-TYPICAL REVERSE CHARACTERISTICS  
PER BRIDGE ELEMENT

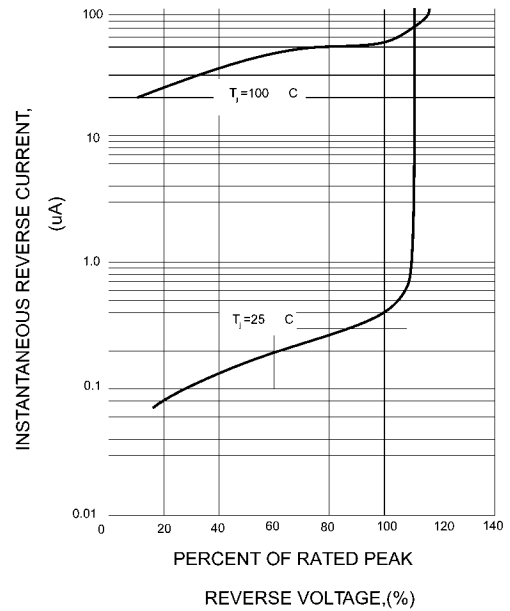


FIG.5-TYPICAL JUNCTION CAPACITANCE  
PER BRIDGE ELEMENT

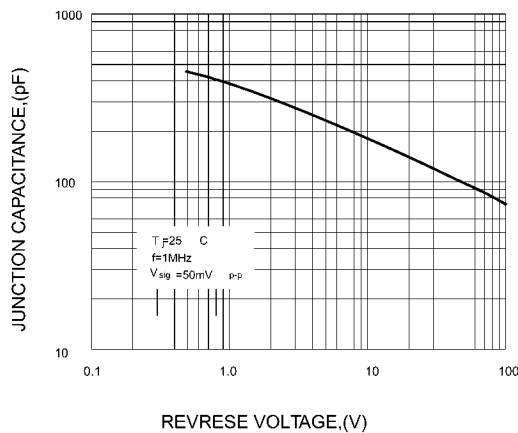


FIG.6-MAXIMUM POWER DISSIPATION

