

SINGLE-PHASE BRIDGE RECTIFIER

FEATURES

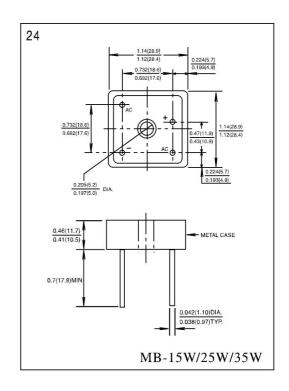
- Low cost
- This series is UL recognized under component index, file number E127707
- · High overload surge current capability
- Low thermal resistance.
- High isolation voltage from case to leads
- High temperature soldering guaranteed: 260°C/10 second, at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- · Case: Metal case
- Terminal: Plated lead 0.04" (1.02mm) diameter.
- Polarity: Polarity symbols marked on case.
- Mounting: Thru hole for #10 screw, 20 in,- lbs. Torqute Max.
- Weight: 0.93 ounce, 26.4gram

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 15005W	KBPC 1501W	KBPC 1502W	KBPC 1504W	KBPC 1506W	KBPC 1508W	KBPC 1510W	UNIT
				MB152W				MB1510W	
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 rate $T_A = 25^{\circ}C$	T				10				μ A
DC blocking voltage per element $\Gamma_{A} = 100^{\circ}C$					1.0				mA
Isolation Voltage from case to leads	$V_{\rm ISO}$	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)	$R_{ heta JC}$	2.0							°C/W
Operating Temperature Range	T_{J}	(-65 to +150)							
Storage Temperature Range	T_{STG}	(-65 to +150)							$^{\circ}\mathbb{C}$

^{1.} Unit mounted on 5" X 4" X 3" (12.8cm X 10.2cm X 7.3cm)Al. finned Plate.

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



FIG.1-DERATING CURVE FOR

OUTPUT RECTIFIED CURREN6T

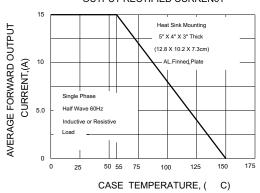


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

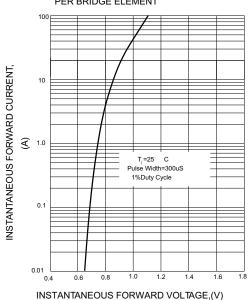


FIG.5-TYPICAL JUNCTION CAPACITANCE

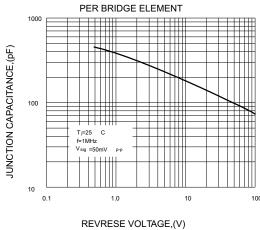


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

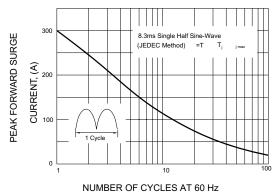


FIG.4-TYPICAL REVERSE CHARACTERISTICS

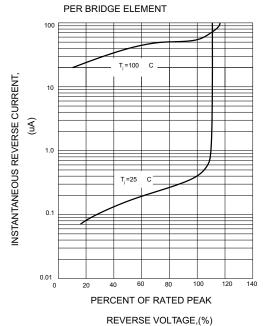


FIG.6-MAXIMUM POWER DISSIPATION

