

**SINGLE-PHASE SILICON BRIDGE RECTIFIER**

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 15 Amperes**

**FEATURES**

- \* Superior thermal desing
- \* 300 amperes surge rating
- \* 1/4" universal faston terminal
- \* Hole thru for # 8 screw

**MECHANICAL DATA**

- \* UL listed the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-O

**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-15**



**MB-15W**

**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	MB1505	MB151	MB152	MB154	MB156	MB158	MB1510	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	15.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	300							Amps
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 175							°C

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MB1505	MB151	MB152	MB154	MB156	MB158	MB1510	UNITS	
Maximum Forward Voltage Drop per element at 7.5A DC	VF	1.1								Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	@TA = 25°C	10								uAmps
	@Tc = 100°C	0.5								mAmps

# RATING AND CHARACTERISTIC CURVES ( MB1505 THRU MB1510 )

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

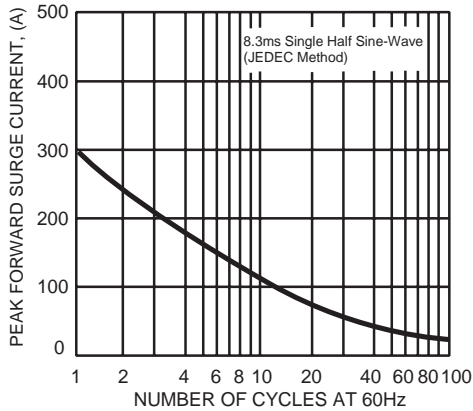


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

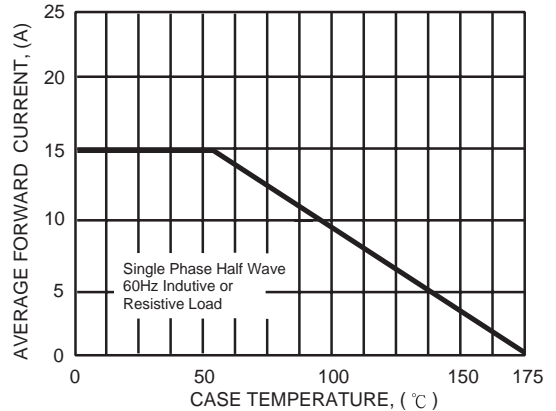


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

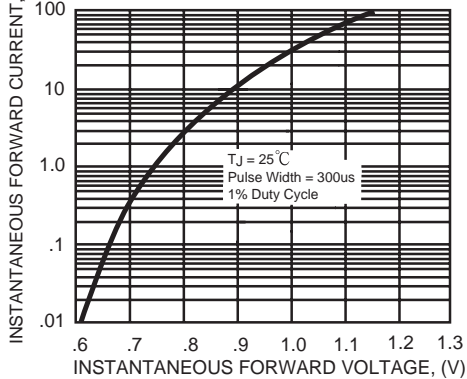


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

