

# MP15005-MP1510

Silicon Bridge Rectifiers



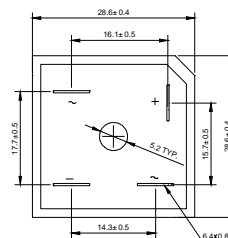
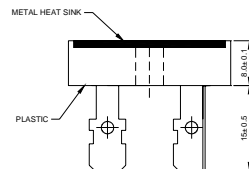
**VOLTAGE RANGE: 50 --- 1000 V**

**CURRENT: 15.0 A**

**MP**

## Features

- ◇ Rating to 1000V PRV
- ◇ Surge overload rating to 300 Amperes peak
- ◇ Ideal for printed circuit board
- ◇ Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ◇ Lead solderable per MIL-STD-202 method 208



Dimensions in millimeters

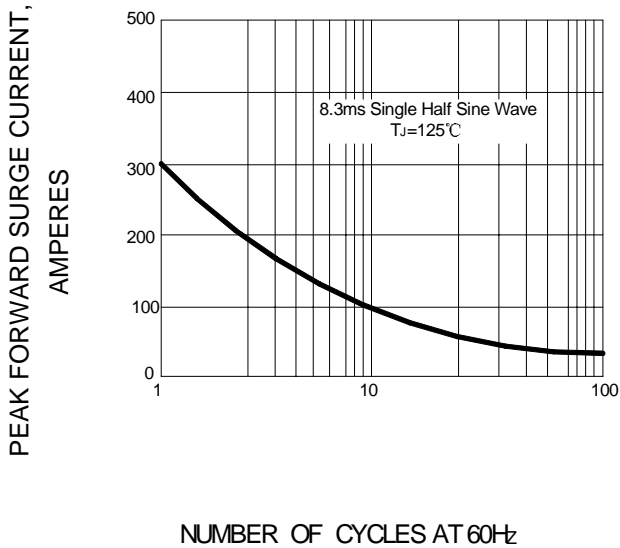
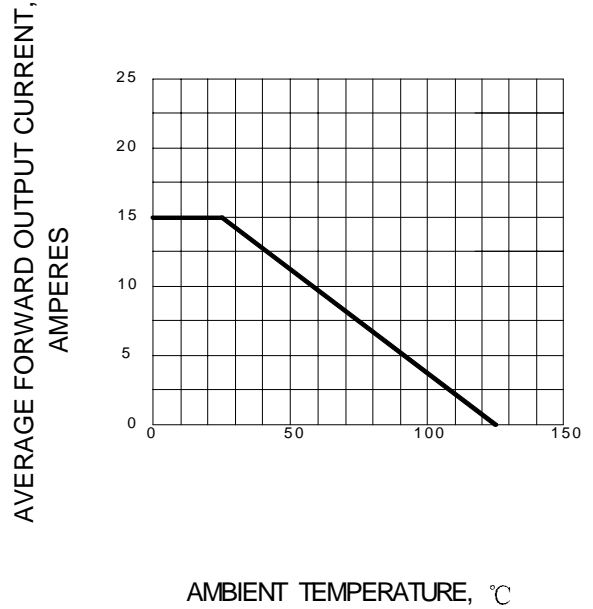
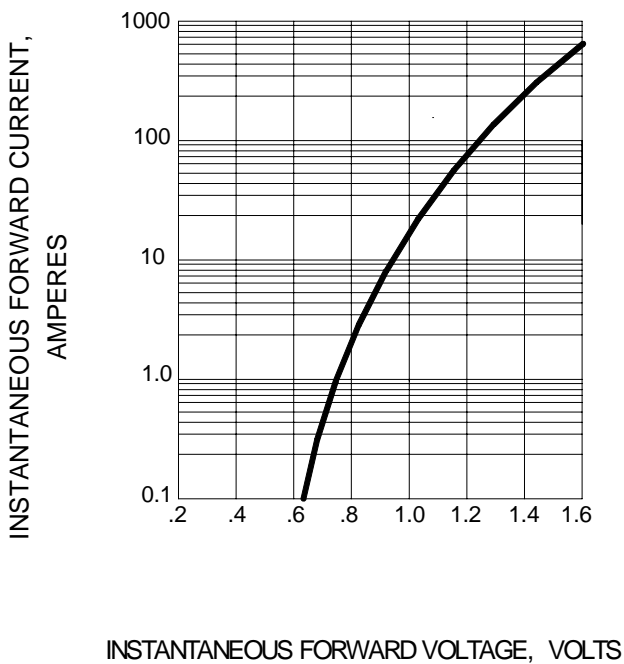
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		MP 15005	MP 1501	MP 1502	MP 1504	MP 1506	MP 1508	MP 1510	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward Output current @ $T_A=25^\circ C$	$I_{F(AV)}$	15.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	300.0							A
Maximum instantaneous forward voltage at 7.5A	$V_F$	1.1							V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	$I_R$	10.0 1.0							$\mu A$ mA
Operating junction temperature range	$T_J$	- 55 ---- + 125							$^\circ C$
Storage temperature range	$T_{STG}$	- 55 ---- + 150							$^\circ C$

## Ratings AND Characteristic Curves

**FIG.1 – PEAK FORWARD SURGE CURRENT**

**FIG.2 – FORWARD DERATING CURVE**

**FIG.3 – TYPICAL FORWARD CHARACTERISTIC**

**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**
