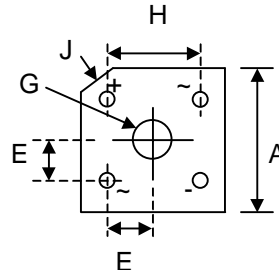
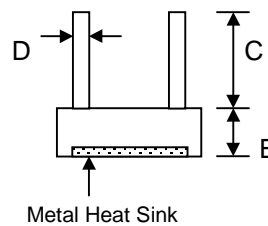


### Features

- Diffused Junction
- High Current Capability
- High Case Dielectric Strength
- High Surge Current Capability
- Ideal for Printed Circuit Board Application
- Plastic Material has Underwriters Laboratory Flammability Classification 94V-O



MP-15		
Dim	Min	Max
A	18.54	19.56
B	6.35	7.60
C	19.00	—
D	1.27 Ø Typical	
E	5.33	7.37
G	Hole for #6 screw	
	3.60	4.00
H	12.20	13.20
J	2.38 x 45° Typical	
All Dimensions in mm		



### Mechanical Data

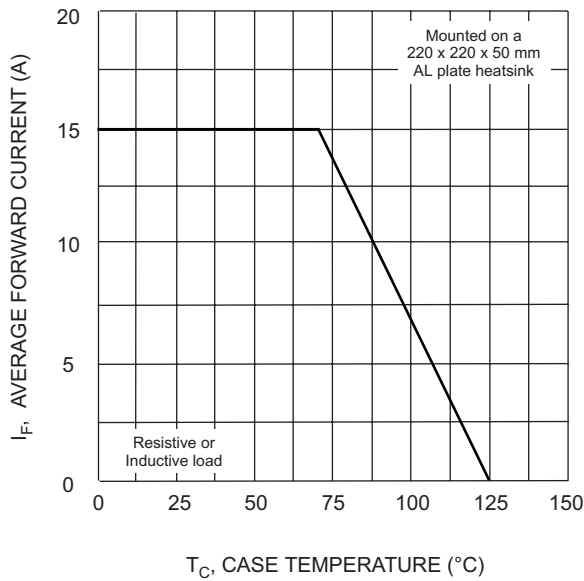
- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Marked on Body
- Weight: 5.4 grams (approx.)
- Mounting Position: Through Hole for #6 Screw
- Mounting Torque: 5.0 Inch-pounds Maximum
- Marking: Type Number

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

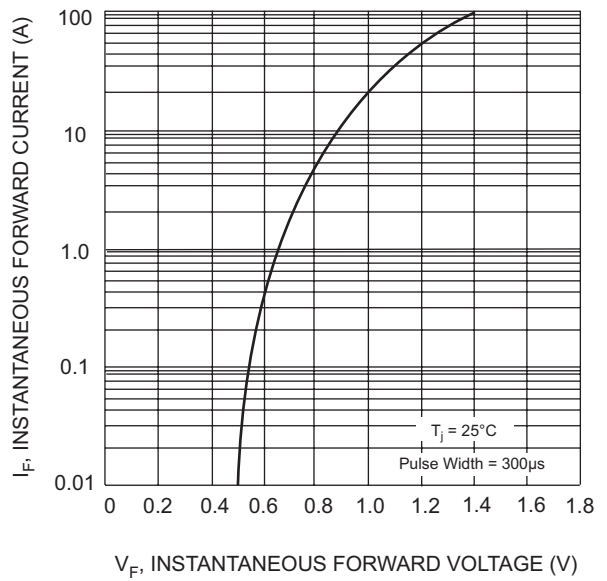
Single Phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

Characteristic	Symbol	MP 1500	MP 1501	MP 1502	MP 1504	MP 1506	MP 1508	MP 1510	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$									
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	V	
DC Blocking Voltage	$V_R$									
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V	
Average Rectified Output Current (Note 1) @ $T_C = 70^\circ\text{C}$	$I_O$	15								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	300								A
Forward Voltage (per element) @ $I_F = 7.5\text{A}$	$V_{FM}$	1.1								V
Peak Reverse Current @ $T_C = 25^\circ\text{C}$	$I_R$	10								$\mu\text{A}$
At Rated DC Blocking Voltage @ $T_C = 100^\circ\text{C}$		1.0								mA
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ ) (Note 2)	$I^2t$	64								$\text{A}^2\text{s}$
Typical Junction Capacitance (Note 3)	$C_j$	110								pF
Typical Thermal Resistance (Note 4)	$R_{\theta JC}$	7.5								K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +125								$^\circ\text{C}$

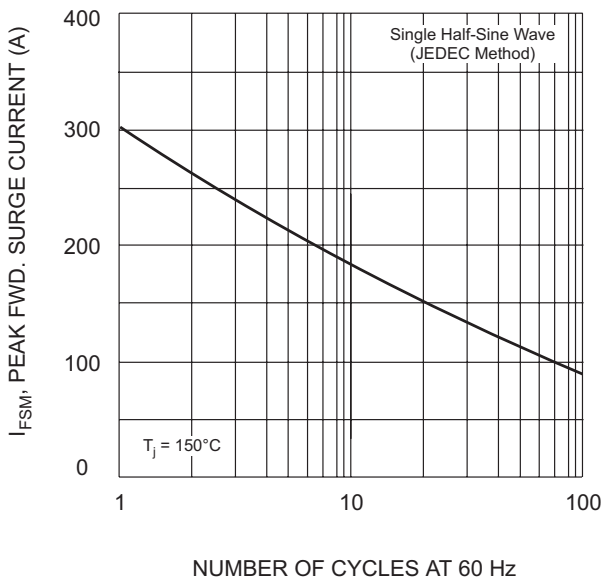
- Note: 1. Mounted on metal chassis.  
 2. Non-repetitive, for  $t > 1\text{ms}$  and  $< 8.3\text{ms}$ .  
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
 4. Thermal resistance junction to case per element.



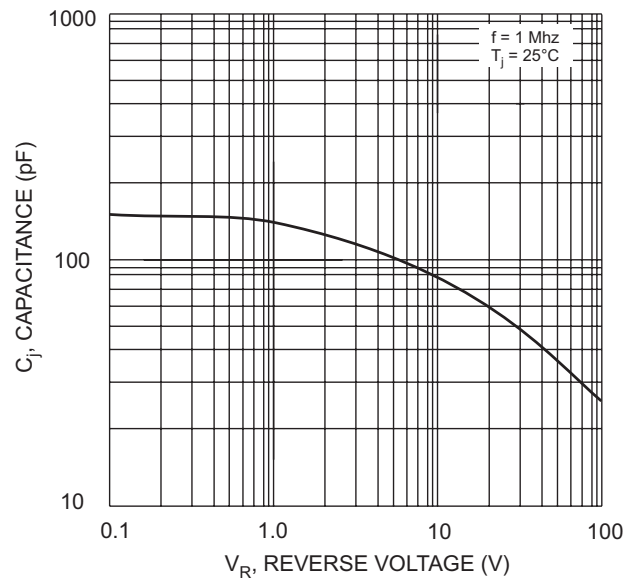
$T_C$ , CASE TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



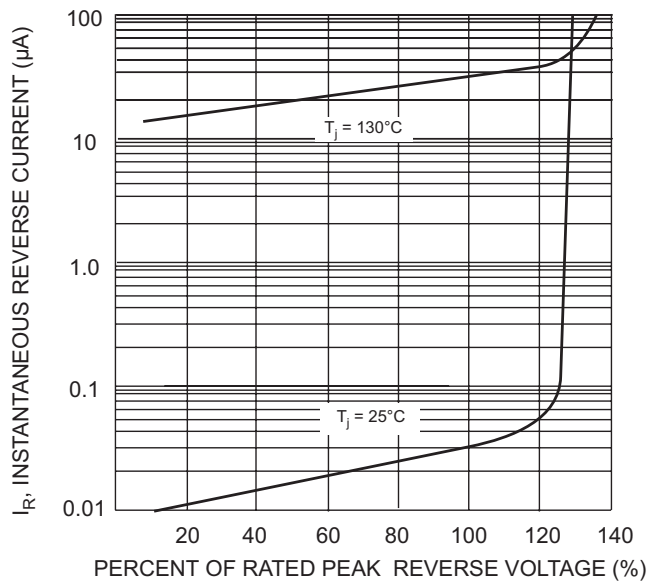
$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz  
Fig. 3 Max Non-Repetitive Surge Current



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Typical Junction Capacitance (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)  
Fig. 5 Typical Reverse Characteristics (per element)

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
MP1500	Square Bridge	200 Units/Box
MP1501	Square Bridge	200 Units/Box
MP1502	Square Bridge	200 Units/Box
MP1504	Square Bridge	200 Units/Box
MP1506	Square Bridge	200 Units/Box
MP1508	Square Bridge	200 Units/Box
MP1510	Square Bridge	200 Units/Box

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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