



Micro Commercial Components  
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# GP15A THRU GP15M

## Features

- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction, Plastic Case
- 1.5 amperes operation at  $T_A=55^\circ\text{C}$  and with no thermal runaway.
- Typical  $I_R$  less than 0.1uA

## Maximum Ratings

- Operating Temperature:  $-55^\circ\text{C}$  to  $+150^\circ\text{C}$
- Storage Temperature:  $-55^\circ\text{C}$  to  $+150^\circ\text{C}$
- Typical Thermal Resistance:  $20^\circ\text{C/W}$  Junction to Lead

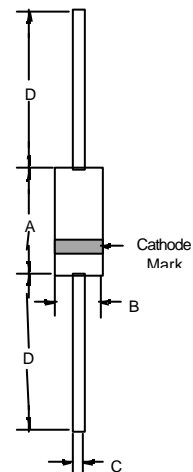
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GP15A	50V	35V	50V
GP15B	100V	70V	100V
GP15D	200V	140V	200V
GP15G	400V	280V	400V
GP15J	600V	420V	600V
GP15K	800V	560V	800V
GP15M	1000V	700V	1000V

## Electrical Characteristics @ $25^\circ\text{C}$ Unless Otherwise Specified

Maximum Average Forward Current	$I_{F(AV)}$	1.5 A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM} = 1.5A;$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0uA 200uA	$T_A = 25^\circ\text{C}$ $T_A = 150^\circ\text{C}$
Typical Reverse Recovery Time	$T_{rr}$	2.0uS	$I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$
Typical Junction Capacitance	$C_J$	15pF	Measured at 1.0MHz, $V_R=4.0V$

## 1.5 Amp Glass Passivated Junction Rectifiers 50 to 1000 Volts

### DO-15



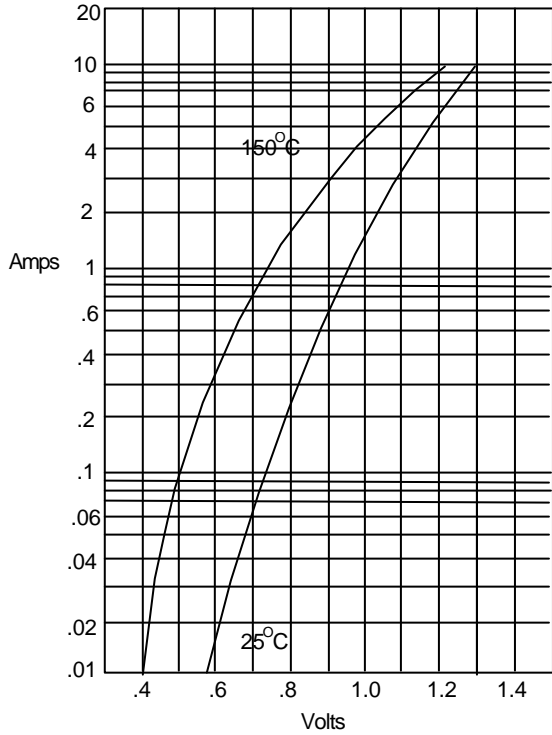
### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.230	.300	5.80	7.60	
B	.104	.140	2.60	3.60	
C	.026	.034	.70	.90	
D	1.000	---	25.40	---	

# GP15A thru GP15M

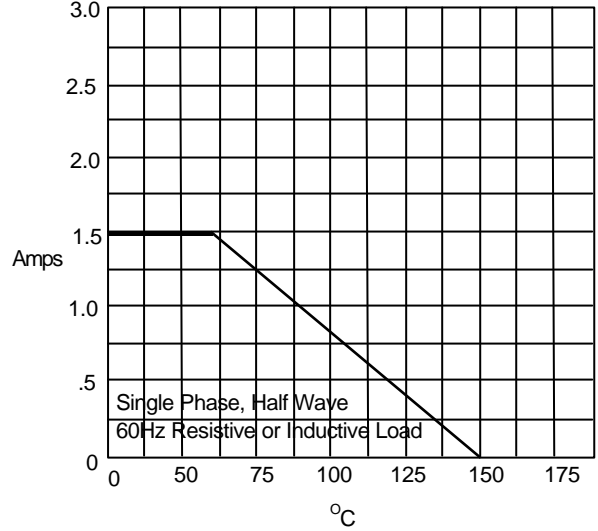


Figure 1  
Typical Forward Characteristics



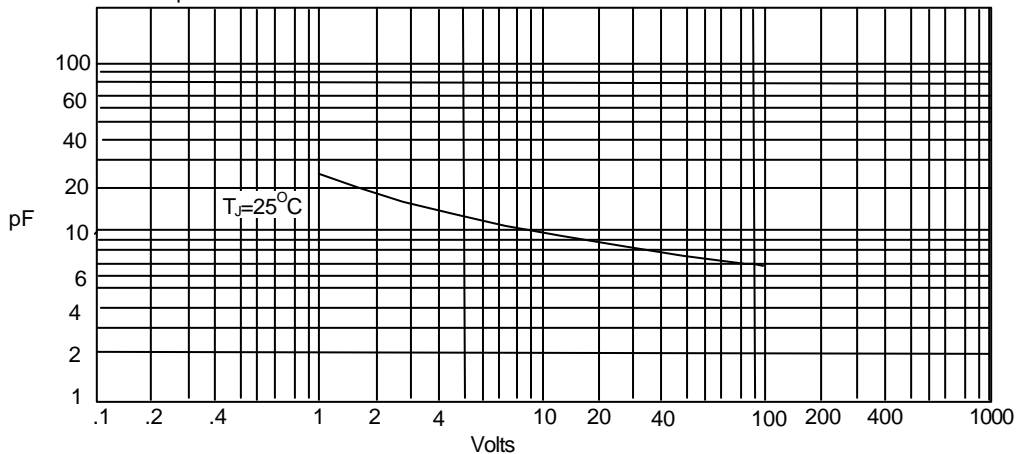
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



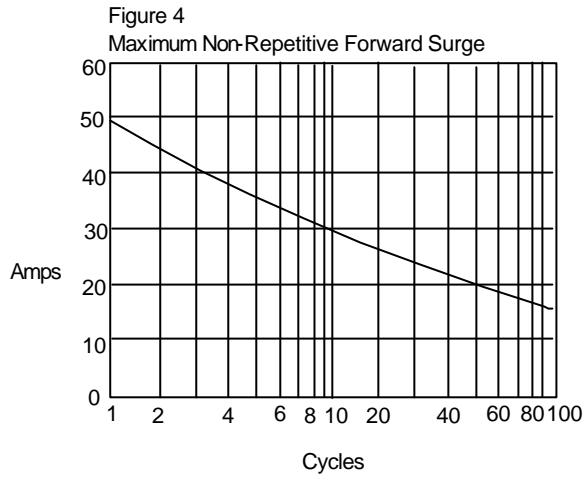
Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

Figure 3  
Junction Capacitance



Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

# GP15A thru GP15M



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles