



Micro Commercial Components

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# RGP15A THRU RGP15M

## Features

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

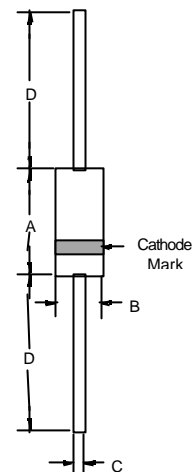
**1.5 Amp Glass  
 Passivated Junction  
 Fast Recovery  
 Rectifiers  
 50 to 1000 Volts**

## 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:  $45^\circ\text{C/W}$  Junction to Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RGP15A	50V	35V	50V
RGP15B	100V	70V	100V
RGP15D	200V	140V	200V
RGP15G	400V	280V	400V
RGP15J	600V	420V	600V
RGP15K	800V	560V	800V
RGP15M	1000V	700V	1000V

DO-15



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

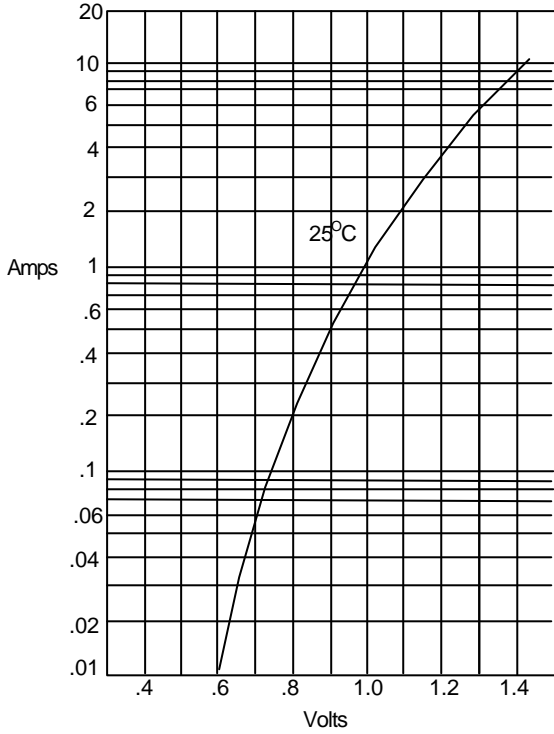
Maximum Average Forward Current	$I_{F(AV)}$	1.5 A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.3V	$I_{FM} = 1.5A$ ; $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0uA 200uA	$T_A = 25^\circ\text{C}$ $T_A = 150^\circ\text{C}$
Maximum Reverse Recovery Time RGP15A-15G RGP15J RGP15K-15M	$T_{rr}$	150nS 250nS 500nS	$I_F = 0.5A$ , $I_R = 1.0A$ , $I_{rr} = 0.25A$
Typical Junction Capacitance	$C_J$	25pF	Measured at 1.0MHz, $V_R = 4.0V$

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	---	

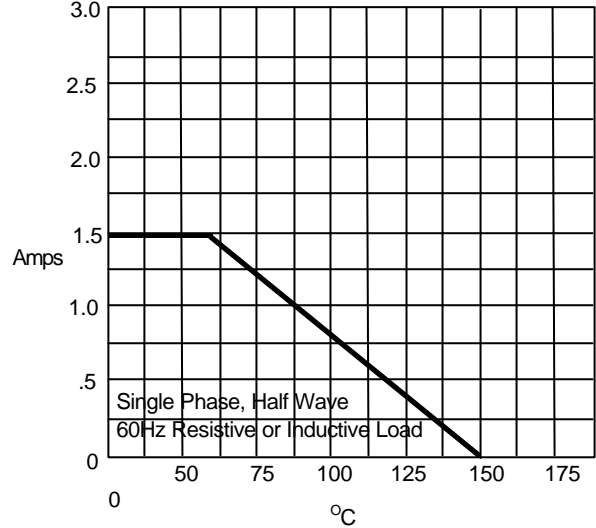
# RGP15A thru RGP15M

Figure 1  
Typical Forward Characteristics



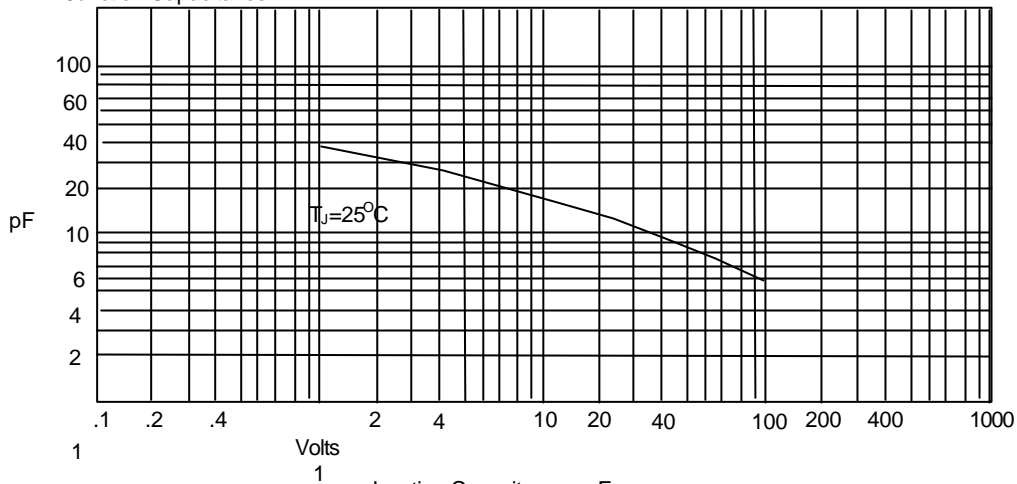
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

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

# RGP15A thru RGP15M

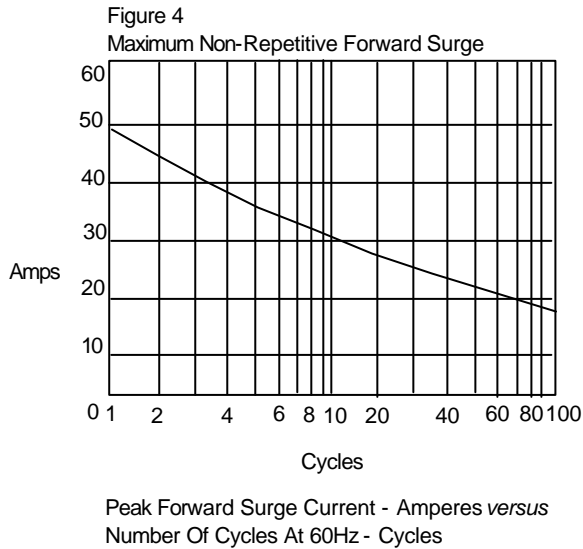


Figure 5  
Reverse Recovery Time Characteristic And Test Circuit Diagram

