

**M·C·C**

Micro Commercial Components  
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**GP30A  
THRU  
GP30M**

## Features

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

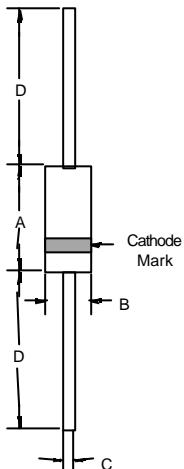
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GP30A	50V	35V	50V
GP30B	100V	70V	100V
GP30D	200V	140V	200V
GP30G	400V	280V	400V
GP30J	600V	420V	600V
GP30K	800V	560V	800V
GP30M	1000V	700V	1000V

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

Maximum Average Forward Current	$I_{F(AV)}$	3.0 A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	125A	8.3ms, half sine
Maximum Instantaneous Forward Voltage			
GP30A -30B	$V_F$	1.2V	$I_{FM} = 3.0\text{A};$
GP30D-30M		1.1V	
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0uA 100uA	$T_A=25^\circ\text{C}$ $T_A=150^\circ\text{C}$
Typical Junction Capacitance	$C_J$	40pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

**3.0 Amp Glass Passivated Junction Rectifiers  
50 to 1000 Volts**

**DO-201AD**

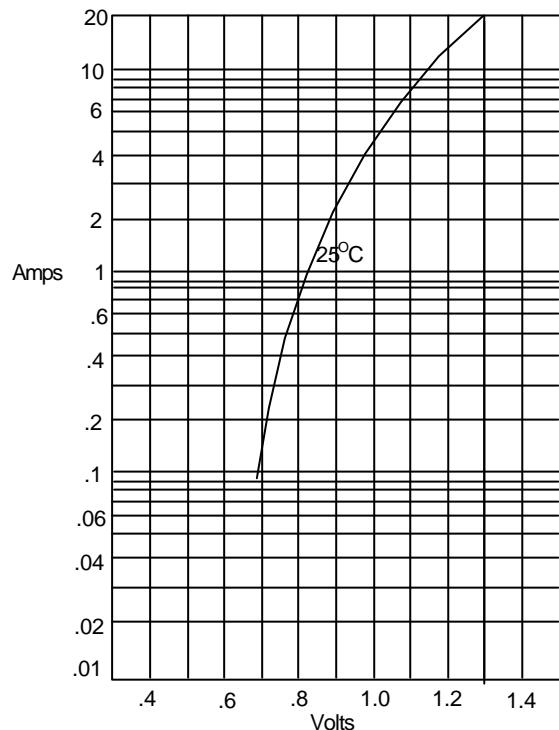


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.370	---	9.50	
B	---	.250	---	6.40	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

# GP30A thru GP30M

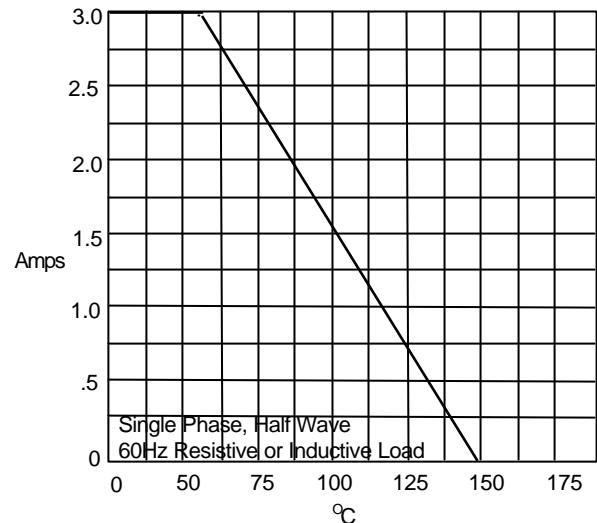
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Figure 1  
Typical Forward Characteristics



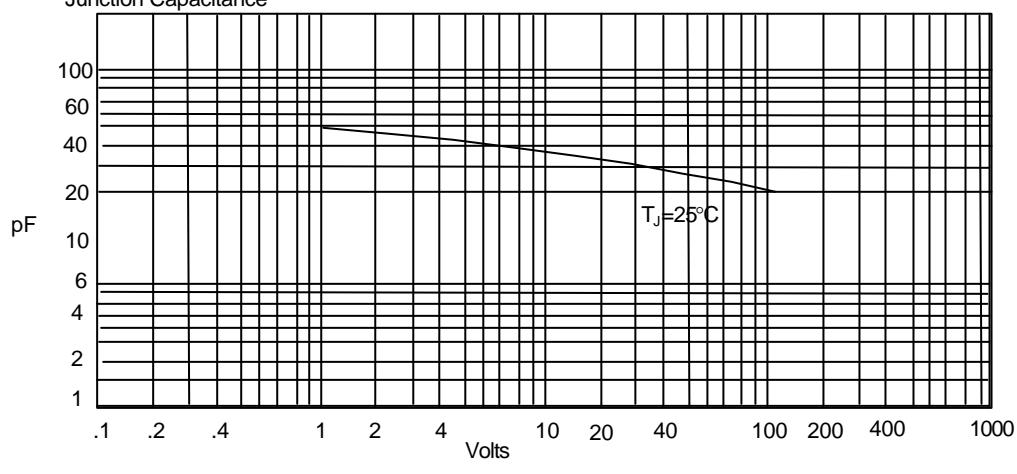
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Ambient Temperature -  $^\circ\text{C}$

Figure 3  
Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

GP30A thru GP30M

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