

**M·C·C**

Micro Commercial Components  
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**GP20A  
THRU  
GP20M**

## Features

- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction, Plastic Case
- 2.0 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:  $10^\circ\text{C/W}$  Junction to Lead

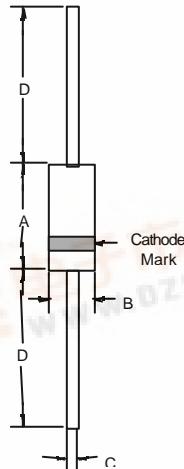
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GP20A	50V	35V	50V
GP20B	100V	70V	100V
GP20D	200V	140V	200V
GP20G	400V	280V	400V
GP20J	600V	420V	600V
GP20K	800V	560V	800V
GP20M	1000V	700V	1000V

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

Maximum Average Forward Current	$I_{F(AV)}$	2.0 A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	65A	8.3ms, half sine
Maximum Instantaneous Forward Voltage GP20A -20B GP20D-20M	$V_F$	1.2V 1.1V	$I_{FM} = 2.0\text{A};$ $T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0uA	
Reverse Recovery Time	$T_{rr}$	2.5uS	$I_f=0.5\text{A}, k=1.0\text{A},$ $I_r=0.25\text{A}$
Typical Junction Capacitance	$C_J$	40pF	Measured at $F=1.0\text{MHz}$ $V_R=4.0\text{V}$

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

**DO-201AE**

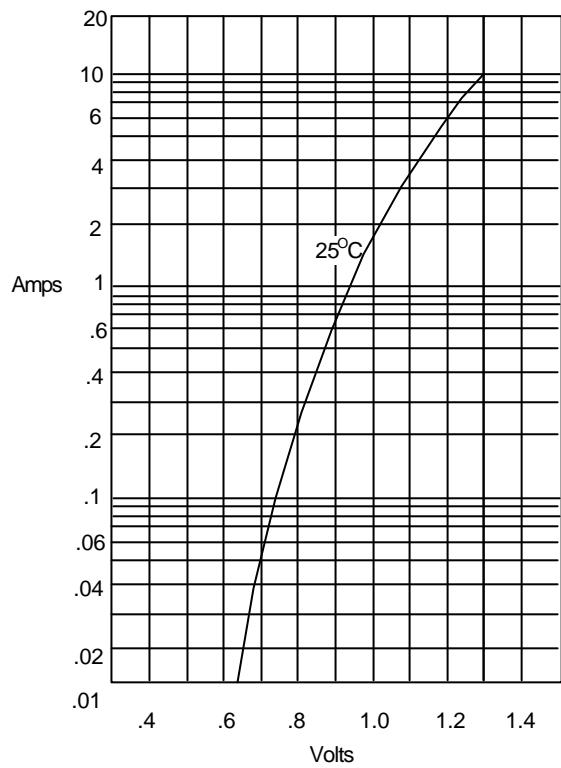


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.370	---	9.50	
B	---	.250	---	6.40	
C	.038	.042	0.96	1.06	
D	1.000	---	25.40	---	

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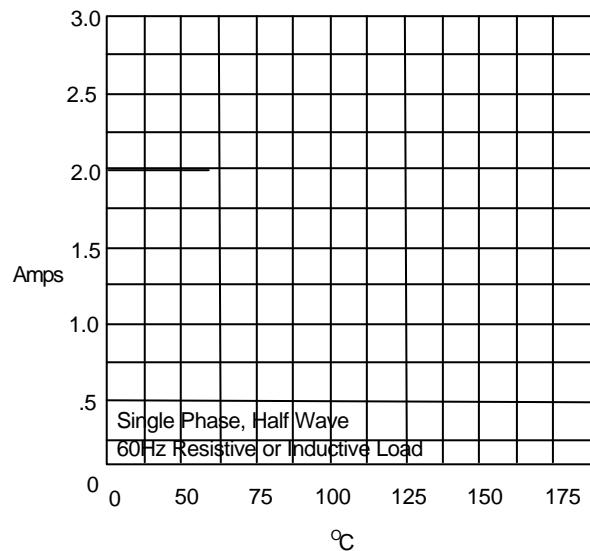
## GP20A thru GP20M

Figure 1  
Typical Forward Characteristics



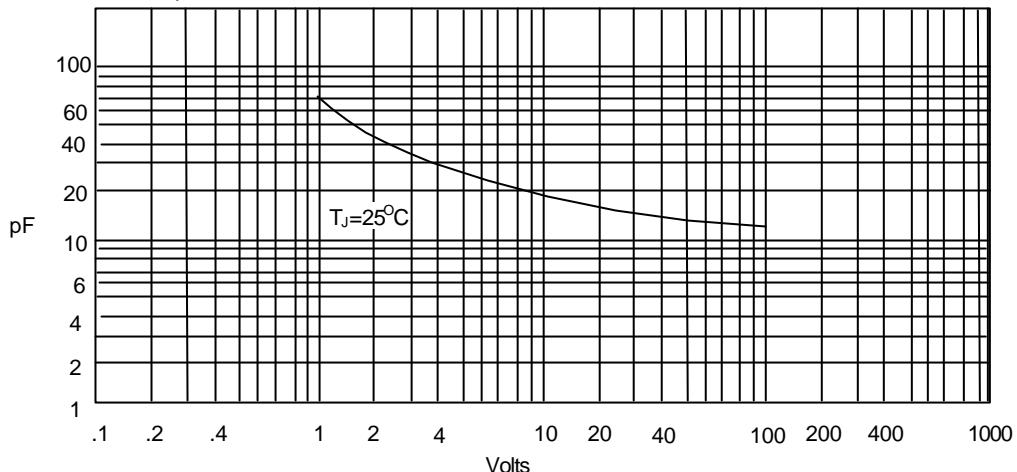
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

Figure 3  
Junction Capacitance

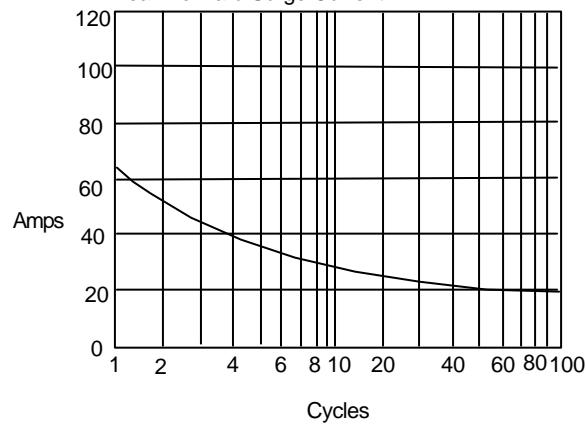


Junction Capacitance - pF versus  
Reverse Voltage - Volts

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GP20A thru GP20M

Figure 4  
Peak Forward Surge Current



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