



Micro Commercial Components  
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# GP20A THRU GP20M

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

### 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  $I_R$  less than 0.1uA

### Maximum Ratings

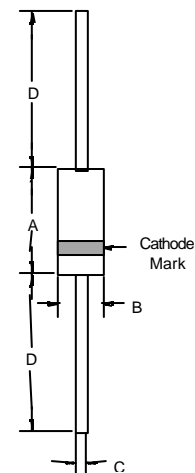
- Operating Temperature:  $-55^\circ\text{C}$  to  $+150^\circ\text{C}$
- Storage Temperature:  $-55^\circ\text{C}$  to  $+150^\circ\text{C}$
- Typical Thermal Resistance:  $10^\circ\text{C/W}$  Junction to Lead

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	$I_{FM} = 2.0A;$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0uA	
Reverse Recovery Time	$T_{rr}$	2.5uS	$I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$
Typical Junction Capacitance	$C_J$	40pF	Measured at $F=1.0\text{MHz}$ $V_R=4.0V$

### DO-201AE

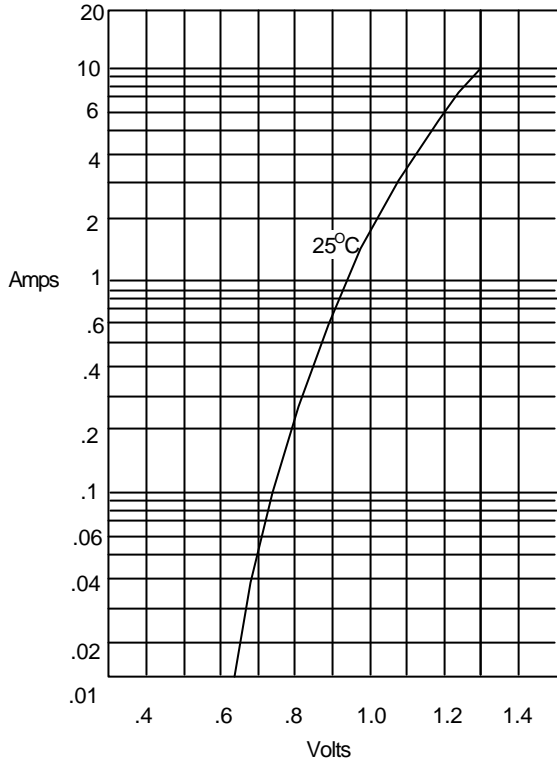


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	.370	---	9.50	
B	---	.250	---	6.40	
C	.038	.042	0.96	1.06	
D	1.000	---	25.40	---	

# GP20A thru GP20M

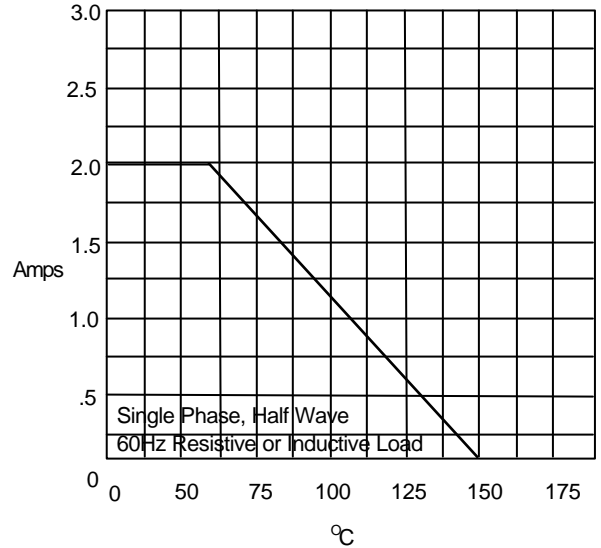


Figure 1  
Typical Forward Characteristics



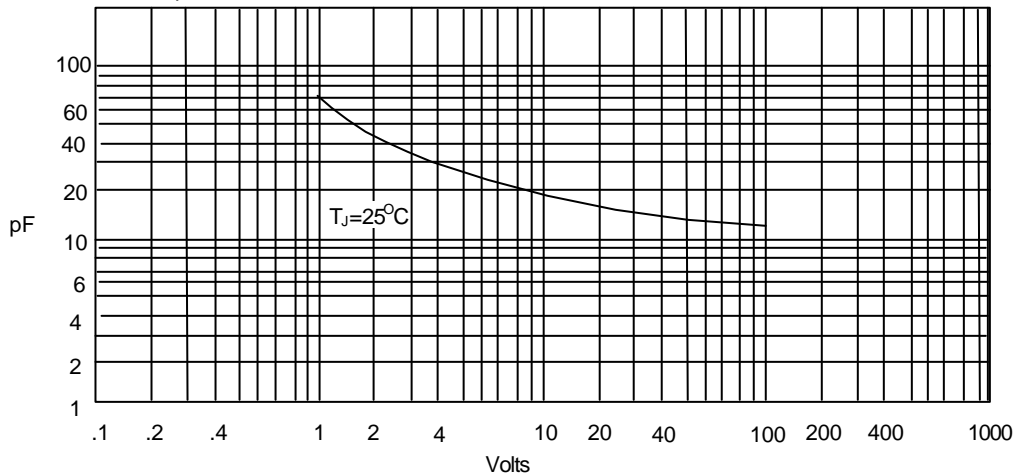
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



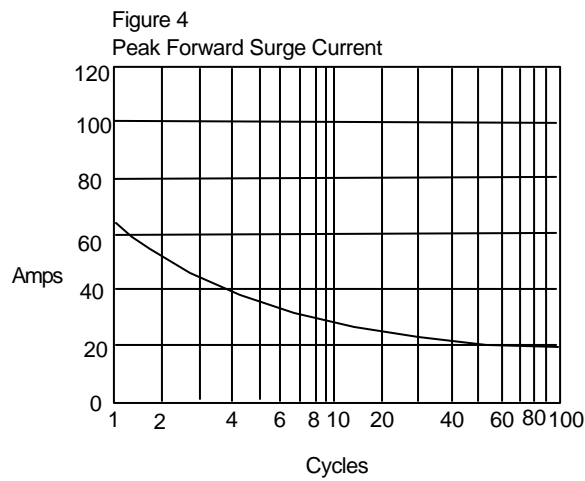
Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 3  
Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

# GP20A thru GP20M



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