Micro Commercial Components
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GP30A THRU GP30M

3.0 Amp Glass Passivated Junction Rectifiers 50 to 1000 Volts

Features

- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction, Plastic Case
- 3.0 amperes operation at T_A=55°C and with no thermal runaway.
- Typical I_R less than 0.1uA

Maximum Ratings

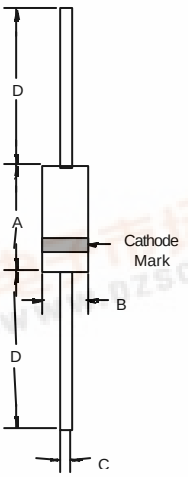
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 20°C/W Junction to Lead

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°C Unless Otherwise Specified

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

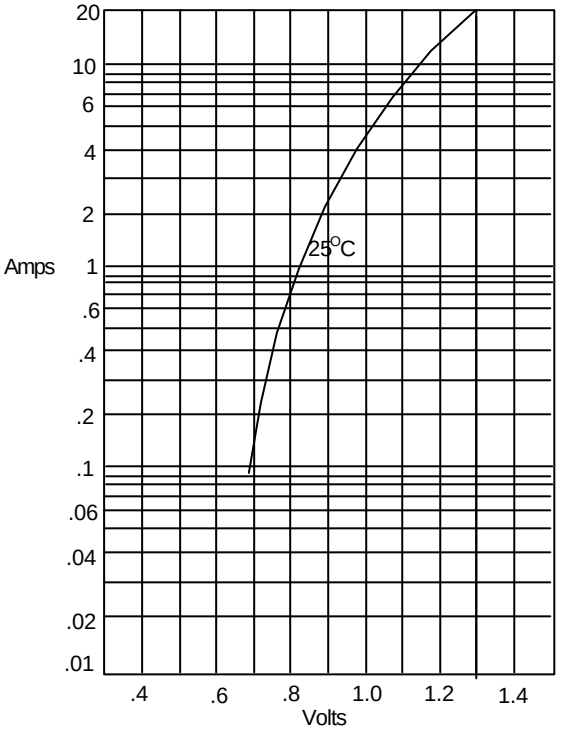
DO-201AD



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

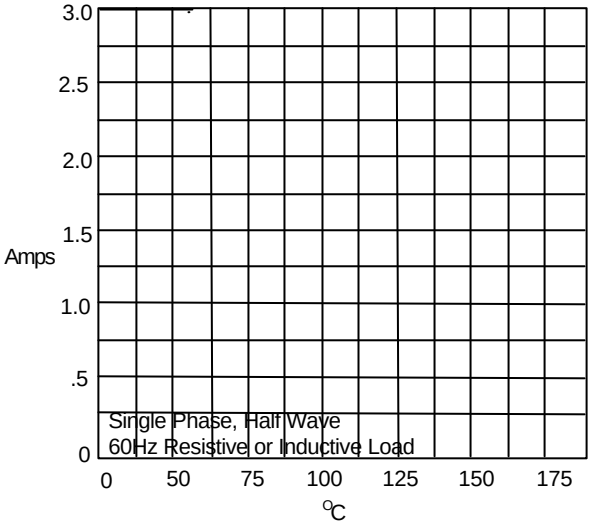
GP30A thru GP30M

Figure 1
Typical Forward Characteristics



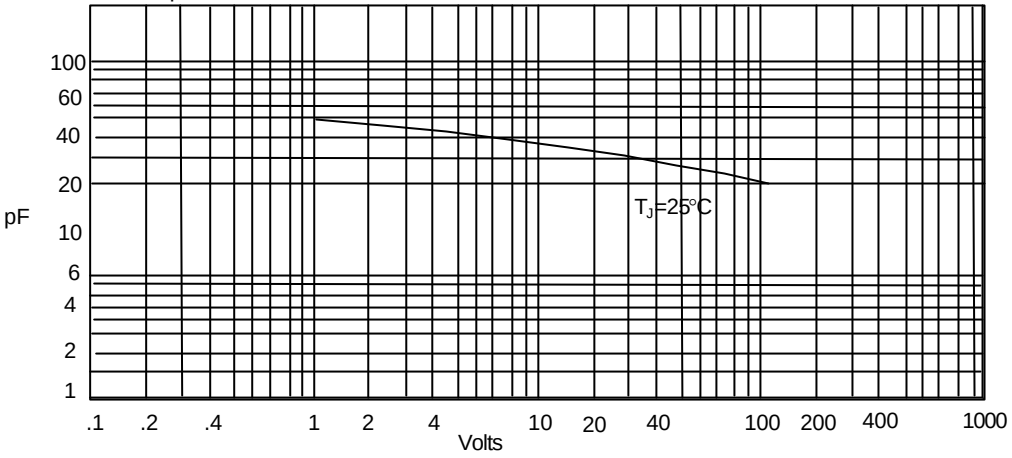
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



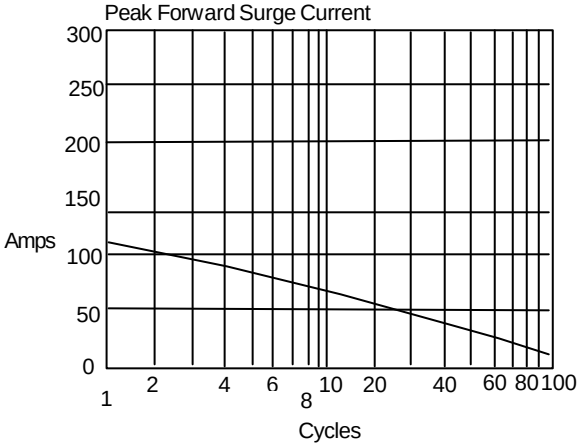
Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Figure 4
Peak Forward Surge Current



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