

M·C·C·

Micro Commercial Components
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GP10A THRU GP10M

Features

- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction, Plastic Case
- 1.0 ampere operation at $T_A=75^{\circ}\text{C}$ and 55°C with no thermal runaway.
- Typical I_R less than 0.1uA

1.0 Amp Glass Passivated Junction Rectifiers 50 to 1000 Volts

Maximum Ratings

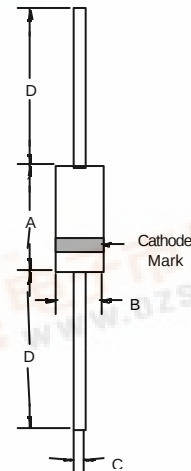
- Operating Temperature: -55°C to $+150^{\circ}\text{C}$
- Storage Temperature: -55°C to $+150^{\circ}\text{C}$
- Typical Thermal Resistance: 55°C/W Junction to Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GP10A	50V	35V	50V
GP10B	100V	70V	100V
GP10D	200V	140V	200V
GP10G	400V	280V	400V
GP10J	600V	420V	600V
GP10K	800V	560V	800V
GP10M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Average Forward Current	$I_{F(AV)}$	1.0 A	$T_A = 75^{\circ}\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage GP10A -10J GP10K-10M	V_F	1.1V 1.2V	$I_F = 1.0\text{A};$ $T_A = 25^{\circ}\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0uA 50uA	$T_A = 25^{\circ}\text{C}$ $T_A = 125^{\circ}\text{C}$
Typical Junction Capacitance GP10A -10J GP10K-10M	C_J	8.0pF 7.0pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

DO-41

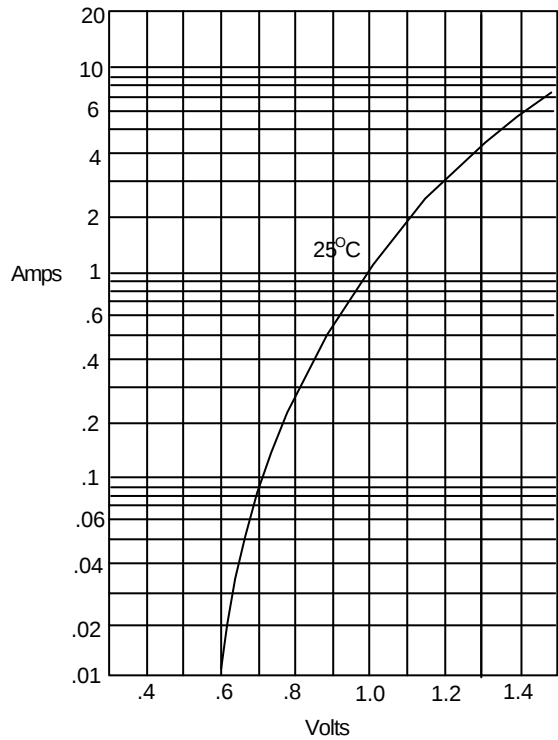


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

GP10A thru GP10M

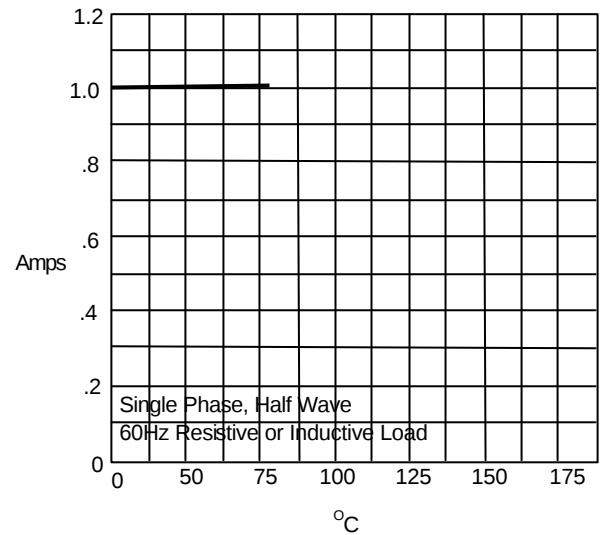


Figure 1
Typical Forward Characteristics



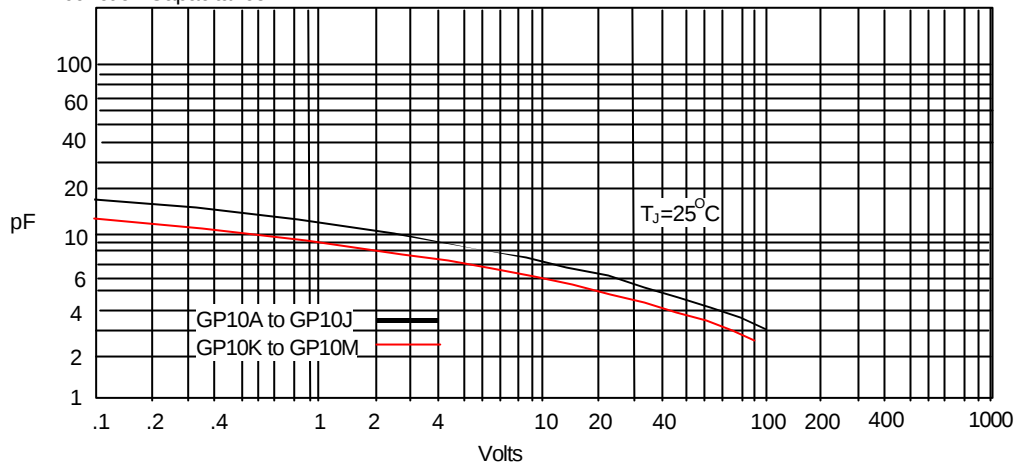
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

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

GP10A thru GP10M

