Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

MUR105GP THRU MUR160GP

1.0 Amp Glass Passivated Super Fast Recovery Rectifier 50 to 600 Volts

Features

- High Surge Capability
- Low Forward Voltage Drop
- High Current Capability
- Super Fast Switching Speed For High Efficiency

Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

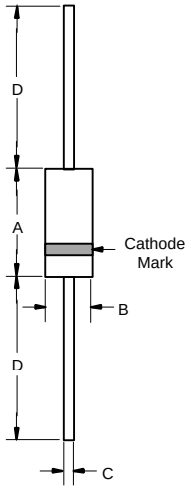
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR105GP	50V	35V	50V
MUR110GP	100V	70V	100V
MUR115GP	150V	105V	150V
MUR120GP	200V	140V	200V
MUR140GP	400V	280V	400V
MUR160GP	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T_A = 55°C
Peak Forward Surge Current	I_{FSM}	25A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MUR105GP-115GP MUR120GP-160GP	V_F	 .97V 1.35V	 I_{FM} = 1.0A; T_A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0µA 50µA	T_A = 25°C T_A = 150°C
Maximum Reverse Recovery Time MUR105GP-140GP MUR160GP	T_{rr}	 45ns 60ns	 I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
Typical Junction Capacitance MUR105GP-115GP MUR120GP-160GP	C_J	 15pF 10pF	 Measured at 1.0MHz, V_R=4.0V

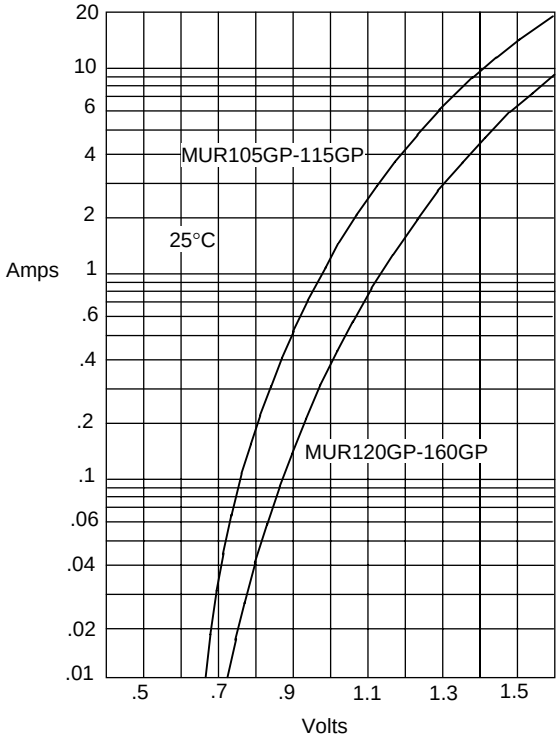
*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

DO-41



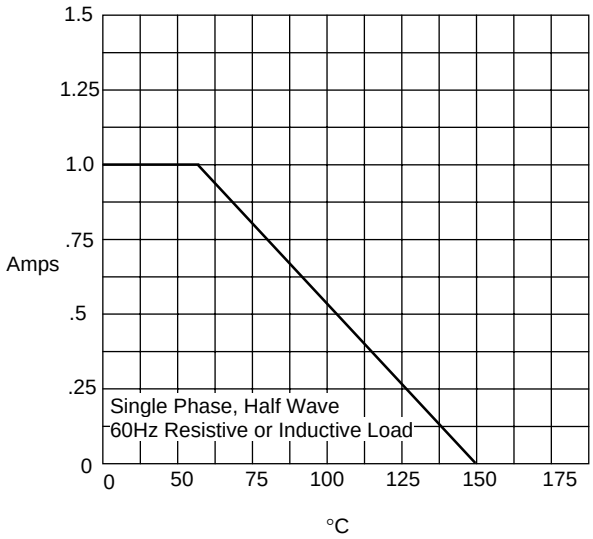
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

Figure 1
Typical Forward Characteristics



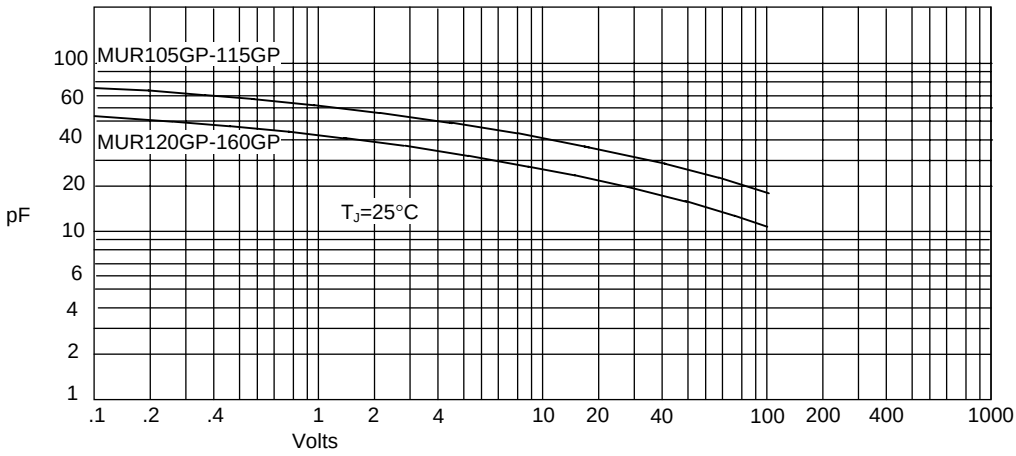
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



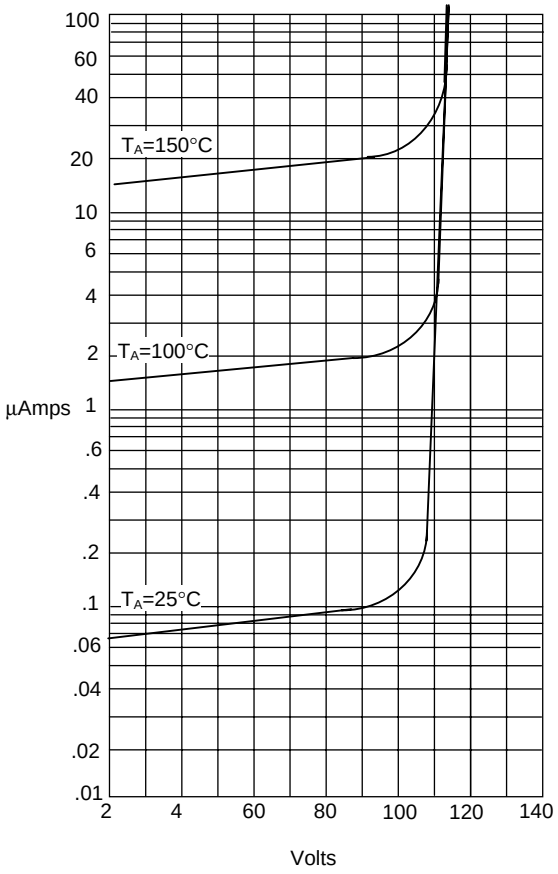
Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 3
Junction Capacitance



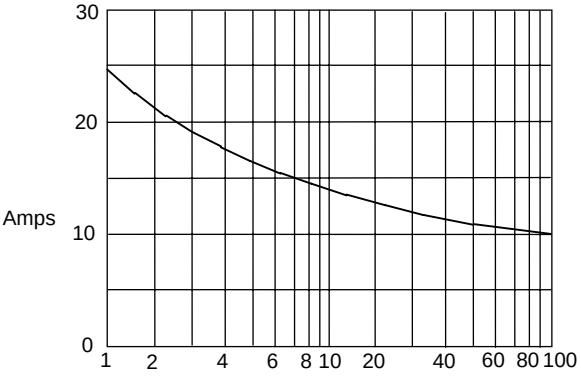
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Figure 4
Typical Reverse Characteristics



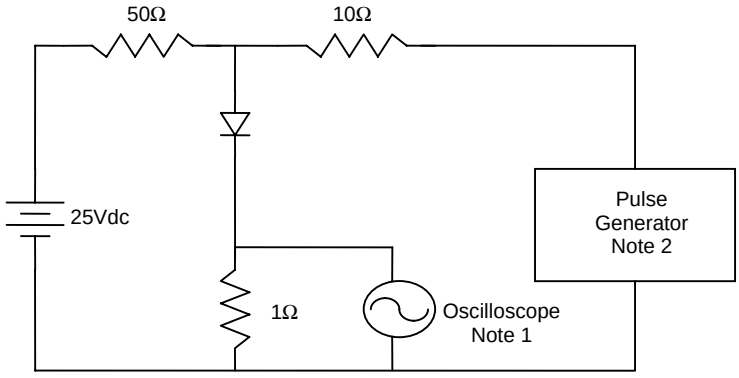
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

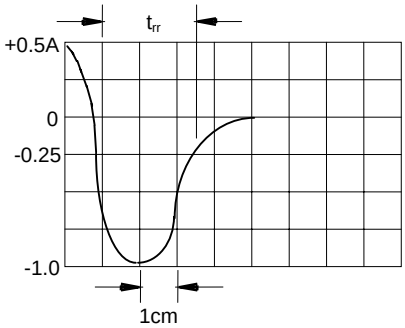
Figure 5
Peak Forward Surge Current



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

Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram





Set Time Base for 20/100ns/cm

Notes:
1. Rise Time = 7ns max.
Input impedance = 1 megohm, 22pF
2. Rise Time = 10ns max.
Source impedance = 50 ohms
3. Resistors are non-inductive