



Micro Commercial Components



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

MUR105 THRU MUR1100

**1 Amp Super Fast
Recovery Rectifier
50 to 1000 Volts**

Features

- Halogen free available upon request by adding suffix "-HF"
- Super Fast Switching Speed For High Efficiency
- Marking:TypeNumber
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Maximum Ratings

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C

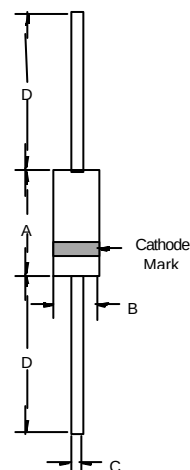
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR105	50V	35V	50V
MUR110	100V	70V	100V
MUR115	150V	105V	150V
MUR120	200V	140V	200V
MUR140	400V	280V	400V
MUR160	600V	420V	600V
MUR180	800V	560V	800V
MUR1100	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1 A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	35A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MUR105-115 MUR120-160 MUR180-1100	V_F	.975V 1.35V 1.75V	$I_{FM} = 1.0A$; $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μ A 50 μ A	$T_A = 25^\circ\text{C}$ $T_A = 150^\circ\text{C}$
Maximum Reverse Recovery Time MUR105-120 MUR140-160 MUR180-1100	T_{rr}	45ns 60ns 75ns	$I_F = 0.5A$, $I_R = 1.0A$, $I_T = 0.25A$
Typical Junction Capacitance	C_J	20pF	Measured at 1.0MHz, $V_R = 4.0V$

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

DO-41

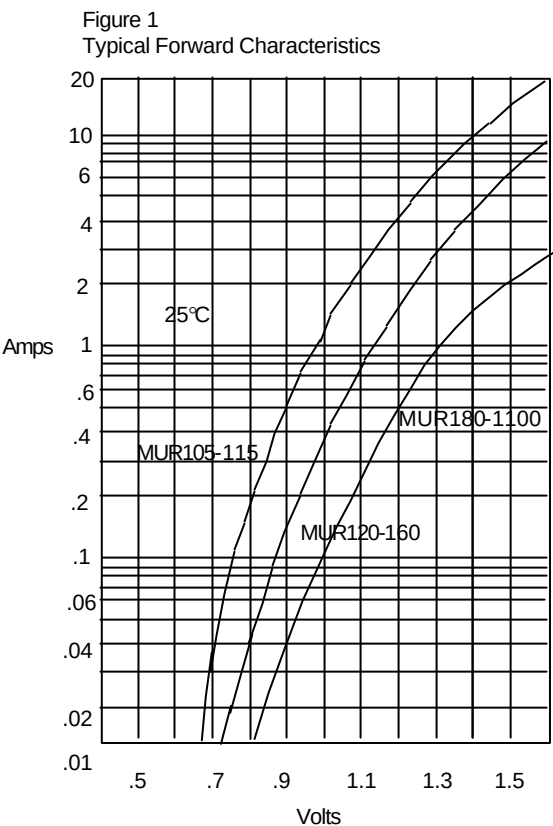


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

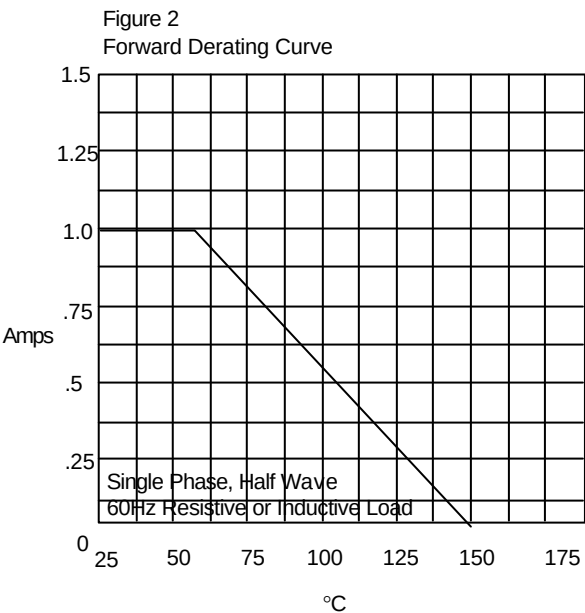
MUR105 thru MUR1100



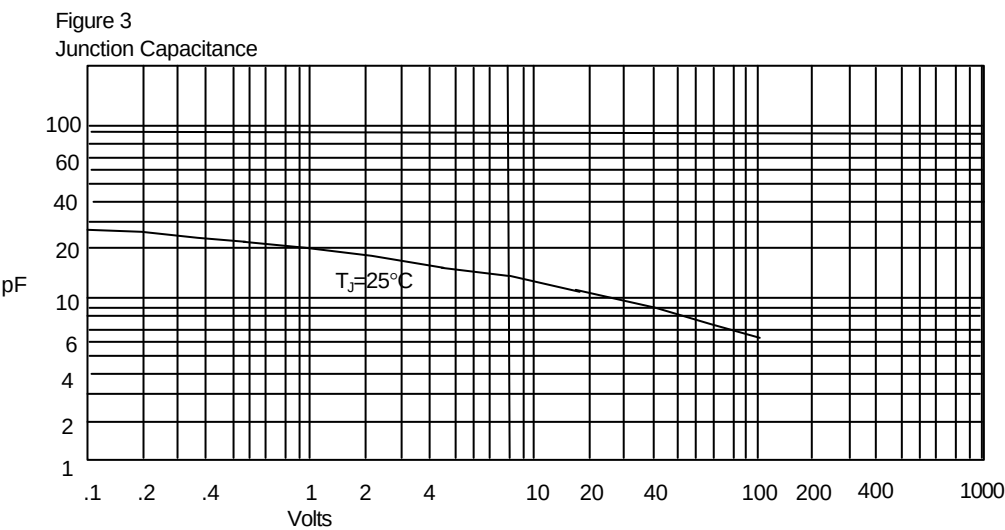
Micro Commercial Components



Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts



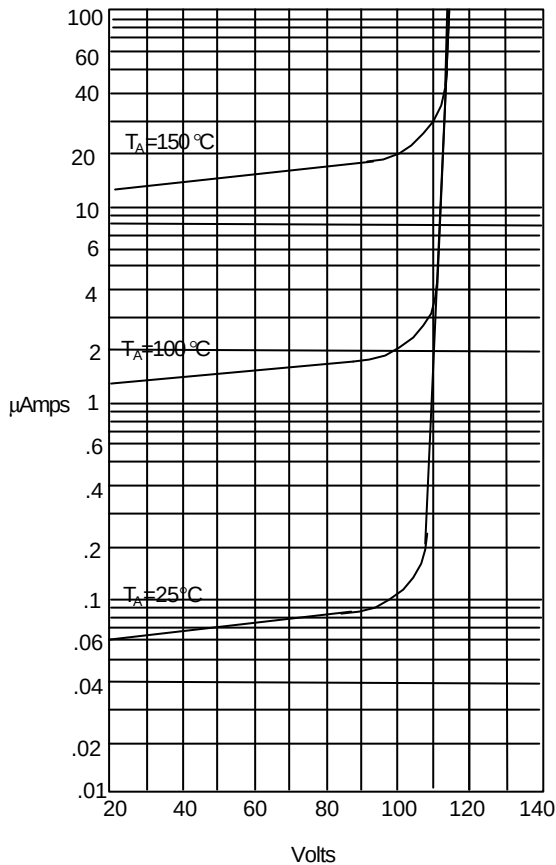
Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C



Junction Capacitance - pF versus
Reverse Voltage - Volts

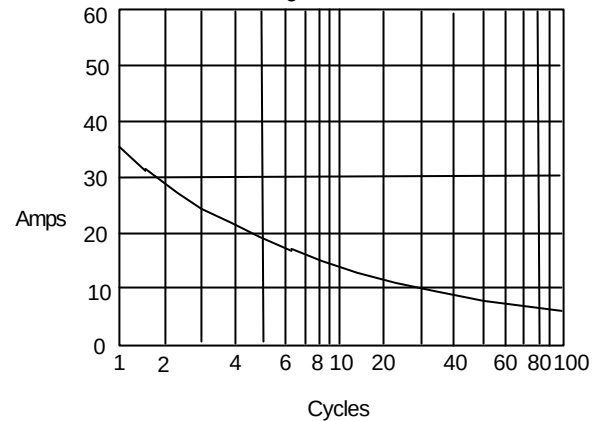
MUR105 thru MUR110

Figure 4
Typical Reverse Characteristics



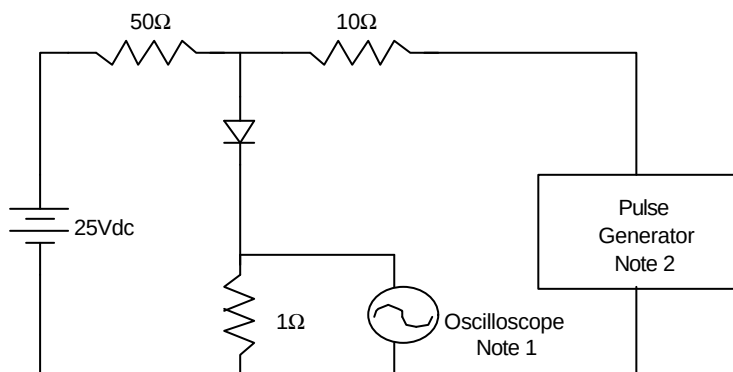
Instantaneous Reverse Leakage Current - MicroAmperes
versus

Figure 5
Peak Forward Surge Current



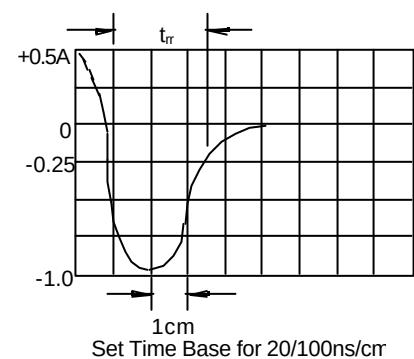
Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles

Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram



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



Set Time Base for 20/100ns/crr



TM

Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 50Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

*****LIFE SUPPORT*****

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Micro Commercial Components \(MCC\):](#)

[MUR120-TP](#) [MUR180-TP](#) [MUR1100-TP](#) [MUR160-TP](#)