

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

MUR405 THRU MUR4100

Features

- High Surge Capability
- Low Leakage and Low Forward Voltage Drop
- Ultra Fast Switching Speed For High Efficiency
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)

4 Amp Ultra Fast **Recovery Rectifier** 50 to 1000 Volts

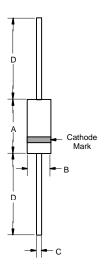
- Maximum Ratings
 Epoxy meets UL 94 V-0 flammability rating
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance 20°C/W
- Moisture Sensitivity Level 1

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reerse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR405	MUR405	50V	35V	50V
MUR410	MUR410	100V	70V	100V
MUR415	MUR415	150V	105V	150V
MUR420	MUR420	200V	140V	200V
MUR440	MUR440	400V	280V	400V
MUR460	MUR460	600V	420V	600V
MUR480	MUR480	800V	550V	800V
MUR4100	MUR4100	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Tooti four characteristics = 20 0 cm ess ctrior wise opening					
Average Forward Current	$I_{F(AV)}$	4.0A	$T_A = 55^{\circ}C$		
Peak Forward Surge	I _{FSM}	150A	8.3ms, half sine		
Current	-1 OW				
Maximum					
Instantaneous					
Forward Voltage					
MUR405-415	V_{F}	1.00V	$I_{FM} = 4.0A;$		
MUR420-460 MUR480-4100		1.35V 1.85V	$T_A = 25^{\circ}C$		
Maximum DC					
Reverse Current At	I_R	10uA	$T_A = 25^{\circ}C$		
Rated DC Blocking		50uA	$T_A = 100^{\circ}C$		
Voltage		SouA	1A= 100 C		
Maximum Reverse					
Recovery Time					
MUR405-415	Trr	45ns 60ns	I _E =0.5A, I _R =1.0A,		
MUR420-460 MUR480-4100	111	75ns	I _{rr} =0.25A		
Typical Junction			Measured at		
Capacitance MUR405-460	0	80pF	1.0MHz, V _R =4.0V		
MUR480-4100	C_J	50pF			

DO-201AD



DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.287	.374	7.30	9.50			
В	.189	.208	4.80	5.30			
С	.048	.052	1.20	1.30			
D	1.000		25.40				

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

MUR405 thru MUR4100

Figure 1
Typical Forward Characteristics



Micro Commercial Components

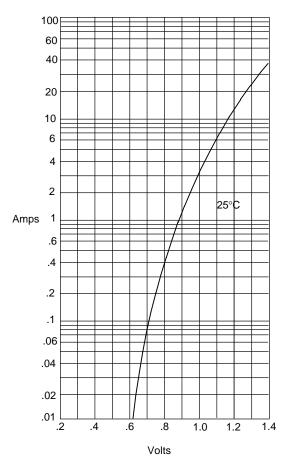


Figure 2
Forward Derating Curve

6

5

4

Amps

2

Single Phase, Half Wave
60Hz Resistive or Inductive Load

°C

Average Forward Rectified Current - Amperes/ersus

Ambient Temperature - °C

100

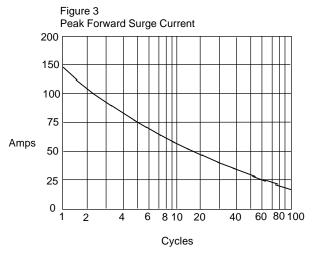
125

150

175

75

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



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles



Micro Commercial Components

Ordering Information:

Device	Packing	
Part Number-TP	Tape&Reel: 1.2Kpcs/Reel	
Part Number-AP	Ammo Packing: 1.2Kpcs/Ammo Box	
Part Number-BP	Bulk: 12Kpcs/Carton	

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.