

Micro Commercial Components



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

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Glass Passivated Junction
- Low Forward Voltage Drop and High Surge Capability
- Ultra Fast Switching Speed For High Efficiency

Maximum Ratings

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

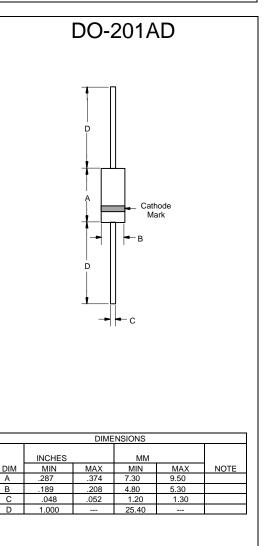
MCC	Device	Maximum	mum Maximum			
Catalog	Marking	Recurrent RMS		DC		
Number		Peak Reverse	Voltage	Blocking		
		Voltage		Voltage		
UF5400GP		50V	35V	50V		
UF5401GP		100V	70V	100V		
UF5402GP		200V	140V	200V		
UF5404GP		400V	280V	400V		
UF5406GP		600V	420V	400V		
UF5407GP		800V	560V	800V		
UF5408GP		1000V	700V	1000V		

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward	I _{F(AV)}	3 A	$T_A = 55^{\circ}C$		
Current					
Peak Forward Surge	I _{FSM}	100A	8.3ms, half sine		
Current					
Maximum					
Instantaneous					
Forward Voltage					
UF5400GP-5402GP	V_{F}	1.0V	I _{FM} = 3.0A;		
UF5404GP		1.3V	T _A = 25°C		
UF5406GP-5408GP		1.7V			
Maximum DC					
Reverse Current At	I _R	10μΑ	T _A = 25°C		
Rated DC Blocking		50μΑ	$T_{A} = 100^{\circ}C$		
Voltage		-			
Maximum Reverse					
Recovery Time					
UF5400GP-5404GP	T _{rr}	50ns	I _F =0.5A, I _R =1.0A,		
UF5406GP-5408GP		75ns	I _{rr} =0.25A		
Typical Junction					
Capacitance					
UF5400GP-5404GP	CJ	75pF	Measured at		
UF5406GP-5408GP		50pF	1.0MHz, V _R =4.0V		

UF5400GP THRU UF5408GP

3 Amp Ultra Fast Glass Passivated Recovery Rectifier 50 to 1000 Volts

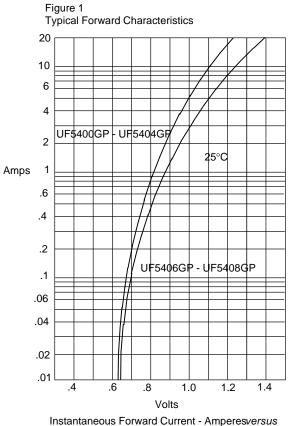


Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

Revision: A

2011/01/01

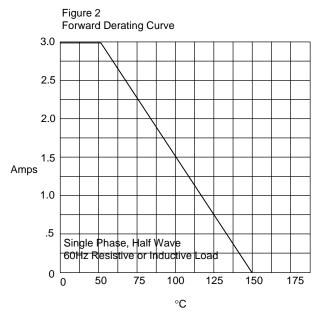
UF5400GP thru UF5408GP



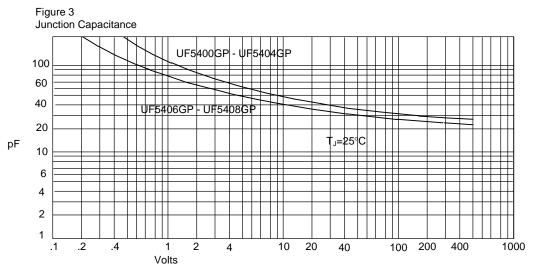
Instantaneous Forward Current - Amperesversu Instantaneous Forward Voltage - Volts



Micro Commercial Components



Average Forward Rectified Current - Amperes/ersus Ambient Temperature $-^{\circ}C$



Junction Capacitance - pF*versus* Reverse Voltage - Volts

www.mccsemi.com

UF5400GP thru UF5408GP

Figure 4

Typical Reverse Characteristics 100 60 40 T_=150°C 20 10 6 T_=100°C 4 2 μAmps 1 .6 .4 TJ=25°C .2 .1 .06 .04 .02 .01 40 60 80 140 20 100 120 Volts

Amps

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

Cycles

6 8 10 20

4

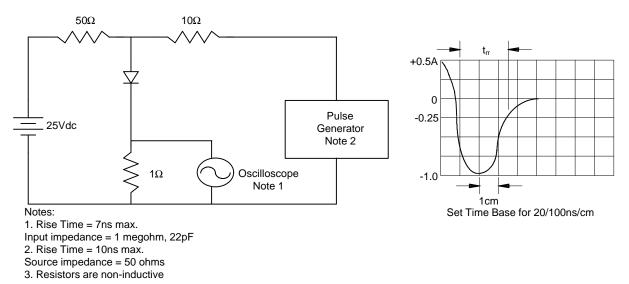
2

1

Instantaneous Reverse Leakage Current - MicroAmperesversus Percent Of Rated Peak Reverse Voltage - Volts

Figure 6

Reverse Recovery Time Characteristic And Test Circuit Diagram



www.mccsemi.com

Revision: A



2011/01/01



40

60 80 1 00



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.

www.mccsemi.com