

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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

UF5400GP THRU UF5408GP

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

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

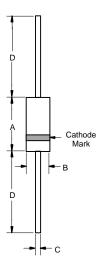
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance 20°C/W

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

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				

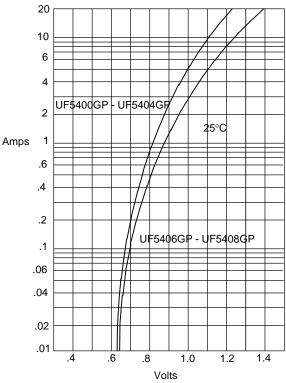
Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

UF5400GP thru UF5408GP

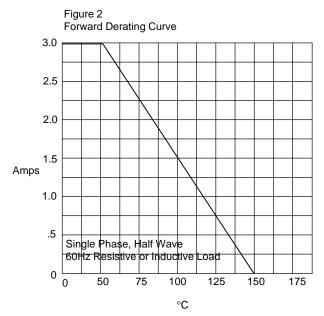
·M·C·C·

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Figure 1
Typical Forward Characteristics

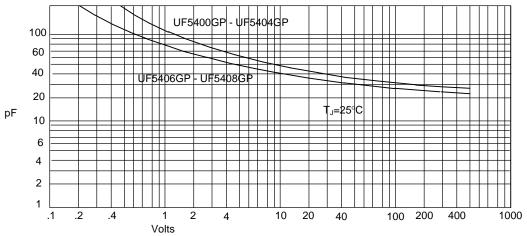


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts



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

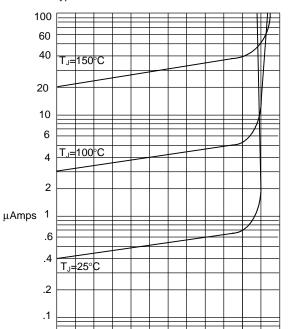




Junction Capacitance - pF*versus* Reverse Voltage - Volts

UF5400GP thru UF5408GP

Figure 4
Typical Reverse Characteristics



.06 .04

.02

20

40

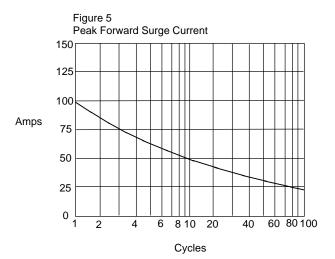
60

80

Volts

· M· C· C·

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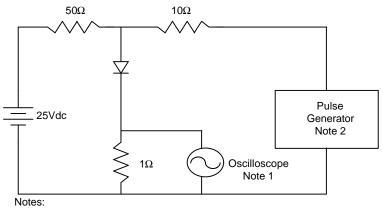
Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

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

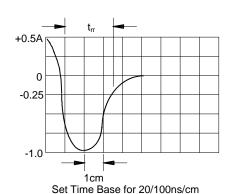
Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram

100

120



140



1. Rise Time = 7ns max.

Input impedance = 1 megohm, 22pF

- 2. Rise Time = 10ns max.
- Source impedance = 50 ohms
- 3. Resistors are non-inductive



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	

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