

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Glass Passivated Chip
- Halogen Free. "Green" Device (Note 2)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 35°C/W Junction to Lead
- Maximum Thermal Resistance: 85°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UG1A	UG1A	50V	35V	50V
UG1B	UG1B	100V	70V	100V
UG1C	UG1C	150V	105V	150V
UG1D	UG1D	200V	140V	200V
UG1F	UG1F	300V	210V	300V
UG1G	UG1G	400V	280V	400V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	1.0A	T _L =120°C
Peak Forward Surge Current	I _{FSM}	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage			
UG1A-UG1D	V _F	0.92V	I _{FM} =1.0A;
UG1F-UG1G		1.25V	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5.0μΑ 100μΑ	T _A =25⁰C; T _A =100⁰C
Maximum Reverse Recovery Time	t _{rr}	25ns	I _F =0.5A; I _R =1.0A; Irr=0.25A
Typical Junction Capacitance			
UG1A-UG1D C,		17pF 15pF	Measured at 1.0MHz,
UG1F-UG1G	UG1F-UG1G		VR=4.0V

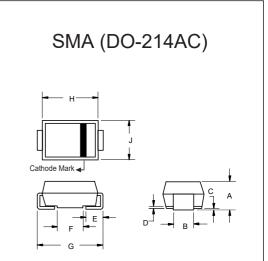
Note :

1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

2. Halogen free "Green" products are defined as those which contain <900ppm bromine,

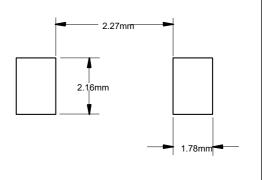
<900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

1 Amp Super Fast Recovery Rectifier 50 to 400 Volts



DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOIL	
Α	0.075	0.096	1.90	2.44		
В	0.050	0.064	1.27	1.63		
С	0.002	0.008	0.051	0.203		
D		0.020		0.51		
E	0.030	0.060	0.76	1.52		
F	0.065	0.091	1.65	2.32		
G	0.189	0.220	4.80	5.59		
Н	0.157	0.187	4.00	4.75		
J	0.090	0.115	2.25	2.92		

SUGGESTED SOLDER PAD LAYOUT





Curve Characteristics

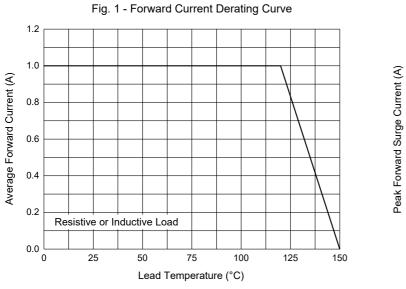


Fig. 3 - Typical Instantaneous Forward Characteristics

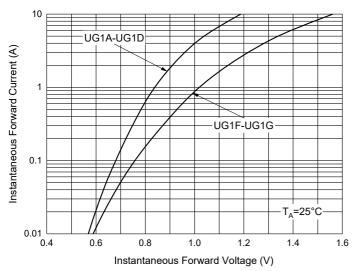
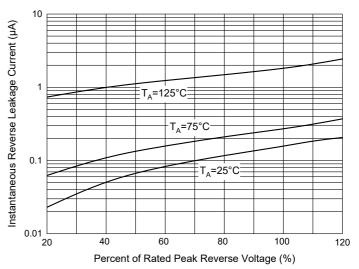


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current 35 30 25 20 15 10 5 8.3 ms Single Half Sine-Wave 0 1 10 100 Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





Ordering Information

Device	Packing	
Part Number-TP	Tape&Reel: 5Kpcs/Reel	

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. *Micro Commercial Components Corp*. products are sold subject to the general terms and conditions of commercial sale, as published at

https://www.mccsemi.com/Home/TermsAndConditions.

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.