

## 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
- 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
- Typical Thermal Resistance: 20°C/W Junction to Lead
- Typical Thermal Resistance: 70°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UG1APL	UG1A	50V	35V	50V
UG1BPL	UG1B	100V	70V	100V
UG1CPL	UG1C	150V	105V	150V
UG1DPL	UG1D	200V	140V	200V
UG1FPL	UG1F	300V	210V	300V
UG1GPL	UG1G	400V	280V	400V
UG1JPL	UG1J	600V	420V	600V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

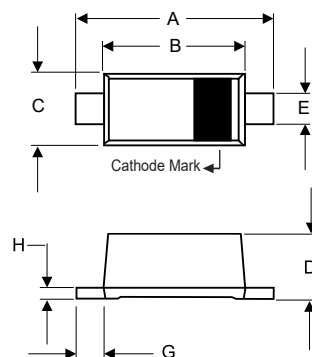
Average Forward Current	$I_{F(AV)}$	1.0A	$T_L=110^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage UG1APL-UG1DPL UG1FPL-UG1GPL UG1JPL	$V_F$	0.92V 1.25V 1.70V	$I_{FM}=1.0A;$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu$ A 50 $\mu$ A	$T_J=25^\circ\text{C};$ $T_J=100^\circ\text{C}$
Maximum Reverse Recovery Time UG1APL-UG1GPL UG1JPL	$t_{rr}$	25ns 35ns	$I_F=0.5A; I_R=1.0A;$ $I_{rr}=0.25A$
Typical Junction Capacitance UG1APL-UG1DPL UG1FPL-UG1GPL UG1JPL	$C_J$	17pF 15pF 16pF	Measured at 1.0MHz, $V_R=4.0V$

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.

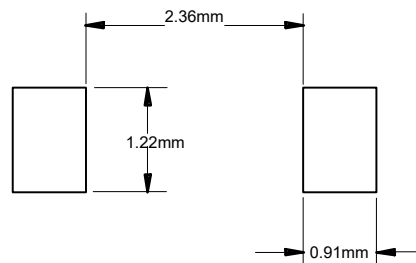
# 1 Amp Super Fast Recovery Rectifier 50 to 600 Volts

## SOD-123FL



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.130	0.152	3.30	3.85	
B	0.100	0.122	2.55	3.10	
C	0.055	0.075	1.40	1.90	
D	0.035	0.053	0.90	1.35	
E	0.020	0.041	0.50	1.05	
G	0.010	----	0.25	----	
H	----	0.010	----	0.25	

## Suggested Solder Pad Layout



## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

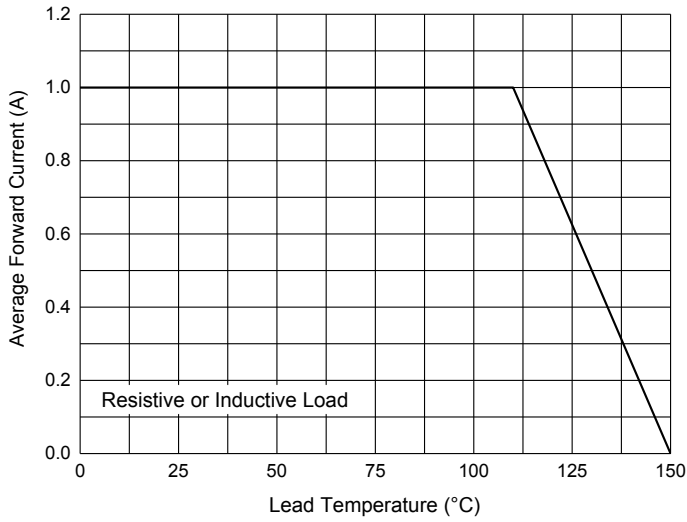


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

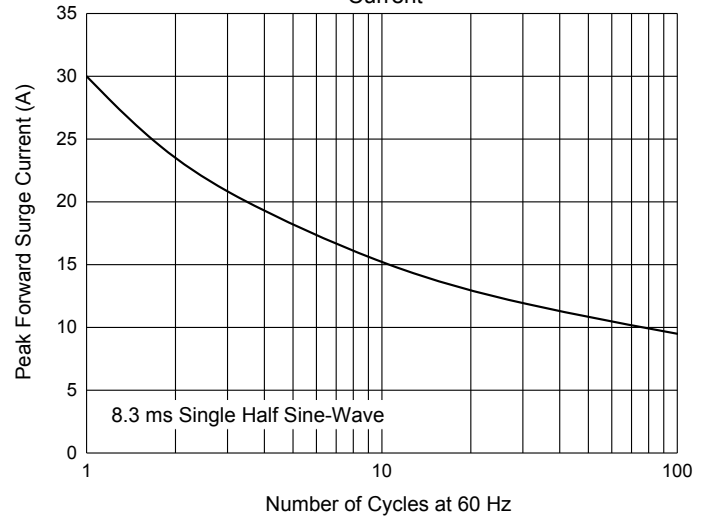


Fig. 3 - Typical Instantaneous Forward Characteristics

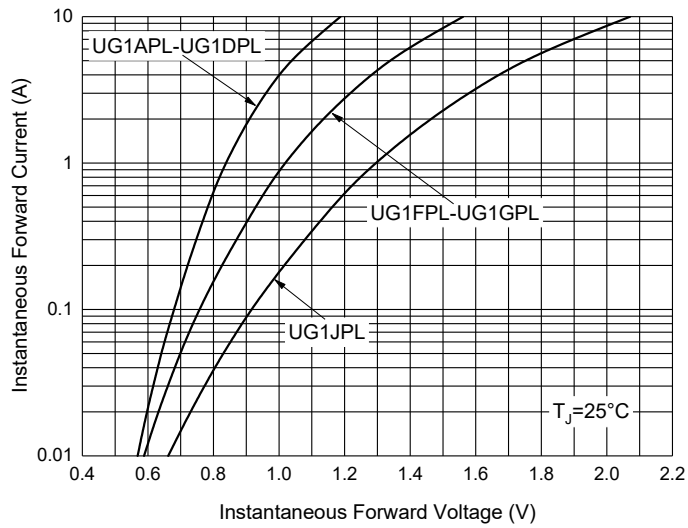
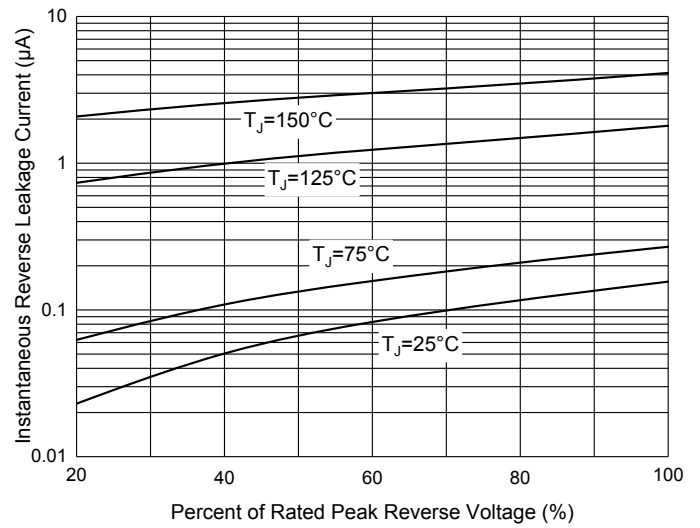


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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