

#### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- 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

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 20°C/W Junction to Lead
- Thermal Resistance: 70°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	iviaximum	Maximum DC Blocking Voltage
MURS1JPL	UR1J	600V	420V	600V

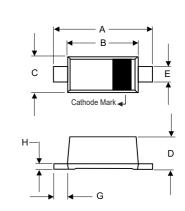
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>L</sub> =110°C
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.25V(Max.) 1.10V(Typ.)	I <sub>FM</sub> =1.0A; I <sub>FM</sub> =1.0A;
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 50μA	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Maximum Reverse Recovery Time	t <sub>rr</sub>	50ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A
Typical Junction Capacitance	С	15pF	Measured at 1.0MHz V <sub>R</sub> =4.0V

## Note:

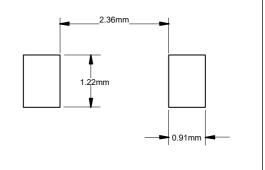
# 1 Amp Super Fast Recovery Rectifier 600 Volts

# SOD-123FL



DIMENSIONS							
DIM	INCHES		MM		NOTE		
DIIVI	MIN	MAX	MIN	MAX	NOTE		
Α	0.130	0.152	3.30	3.85			
В	0.100	0.122	2.55	3.10			
С	0.055	0.075	1.40	1.90			
D	0.035	0.053	0.90	1.35			
Е	0.020	0.041	0.50	1.05			
G	0.010		0.25				
Н		0.010		0.25			

### **Suggested Solder Pad Layout**



<sup>1.</sup> High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

<sup>2.</sup>Mounted on P.C.B with 3mm\*3mm Copper Pad Areas.



## **Curve Characteristics**

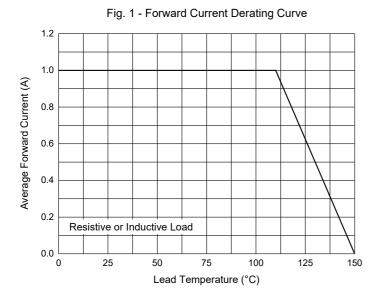


Fig. 3 - Typical Instantaneous Forward Characteristics

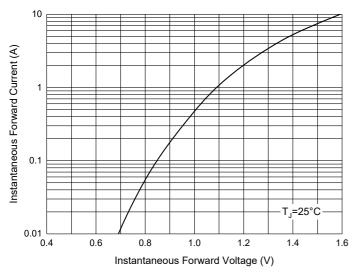


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

35

20

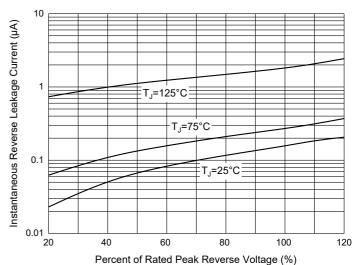
20

20

10

8.3 ms Single Half Sine-Wave
0
1
10
Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





## **Ordering Information**

Device	Packing	
MURS1JPL-TP	Tape&Reel: 2.5Kpcs/Reel	

Note: Adding "-HF" Suffix For Halogen Free, eg. MURS1JPL-TP-HF

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