

#### **Features**

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant(Note 2) ("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
- Maximum Thermal Resistance: 20°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum	Maximum DC Blocking Voltage
MURS1G	UR1G	400V	280V	400V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

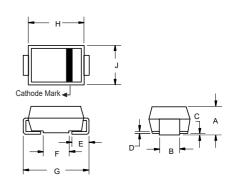
Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>L</sub> =110°C
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.25V	I <sub>FM</sub> =1.0A;
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 200μA	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Reverse Recovery Time	t <sub>rr</sub>	25ns(Max) 20ns(Typ)	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A
Typical Junction Capacitance	Сл	10pF	Measured at 1.0MHz V <sub>R</sub> =4.0V

#### Note:

- 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- 2. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

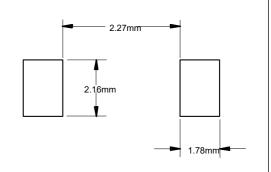
# 1 Amp Super Fast Recovery Rectifier 400 Volts

# SMA (DO-214AC)



DIMENSIONS							
DIM	INCHES		MM		NOTE		
Dilvi	MIN	MAX	MIN	MAX	NOTE		
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**

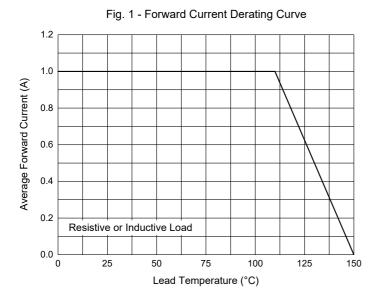


Fig. 3 - Typical Instantaneous Forward Characteristics

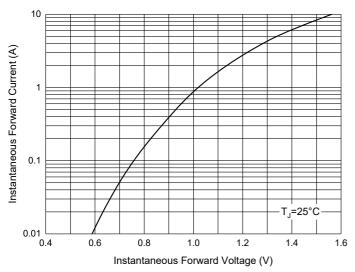


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge

Current

35

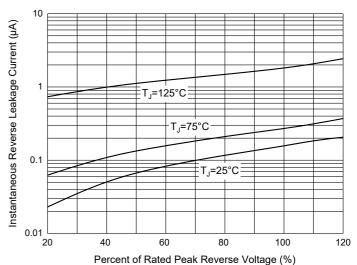
20

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	
(Part Number)-TP	Tape&Reel: 5Kpcs/Reel	

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