

### **Features**

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

# 1 Amp Super Fast Recovery Rectifier 200 Volts

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 12°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURS1DBL	UR1DL	200V	140V	200V

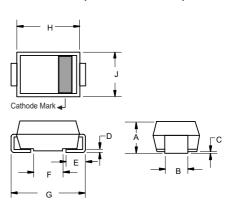
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>L</sub> =140°C
Peak Forward Surge Current	I <sub>FSM</sub>	40A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.9V	I <sub>FM</sub> =1.0A; T <sub>J</sub> =25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	2.0μA 50μA	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Maximum Reverse Recovery Time	T <sub>RR</sub>	25ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A

#### Note:

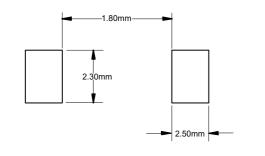
- 1. High Temperature Solder Exemptions Applied, See EU Directive Annex Notes 7a.
- 2. Halogen free "Green"products are defined as those which contain <900ppm bromine,
- <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

## **SMB (DO-214AA)**



DIMENSIONS								
DIM	INCHES		MM		NOTE			
DIIVI	MIN	MAX	MIN	MAX	NOTE			
Α	0.079	0.103	2.00	2.62				
В	0.075	0.087	1.91	2.21				
C	0.002	800.0	0.05	0.20				
D	0.006	0.012	0.15	0.31				
Е	0.030	0.060	0.76	1.52				
F	0.065	0.091	1.65	2.32				
G	0.200	0.220	5.08	5.59				
Н	0.160	0.191	4.06	4.85				
J	0.130	0.155	3.30	3.94				

#### **Suggested Solder Pad Layout**





## **Curve Characteristics**

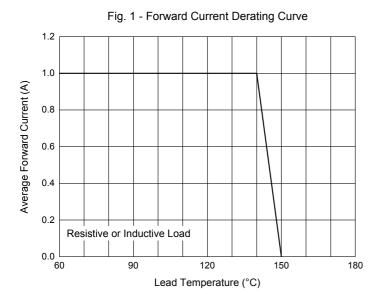


Fig. 3 - Typical Instantaneous Forward Characteristics

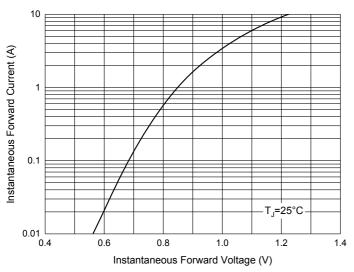


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

30

40

40

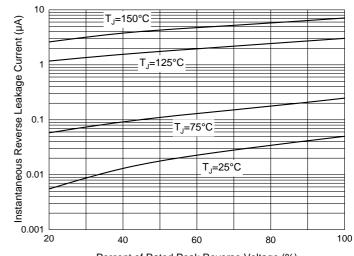
40

8.3 ms Single Half Sine-Wave

0

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics



Percent of Rated Peak Reverse Voltage (%)



## **Ordering Information**

Device	Packing
MURS1DBL-TP	Tape&Reel: 3Kpcs/Reel

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