

### **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

# 1 Amp Super Fast Recovery Rectifier 600 Volts

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 13°C/W Junction to Lead

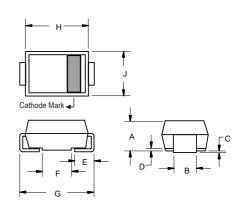
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum	Maximum DC Blocking Voltage
MURS1JBL	UR1JL	600V	420V	600V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	1.0A	See Fig 1
Maximum Surge Current	I <sub>FSM</sub>	35A	8.3ms,Half Sine
Max Peak Forward Voltage	V <sub>FM</sub>	1.25V	I <sub>F</sub> =1.0A
Max Peak Reverse Current	I <sub>RM</sub>	5.0μA 150μA	T <sub>J</sub> =25°C; T <sub>J</sub> =150°C
Typical Junction Capacitance	СЈ	15pF	V <sub>R</sub> =4.0A, f=1MHz
Maximum Reverse Recovery Time	T <sub>RR</sub>	50ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A

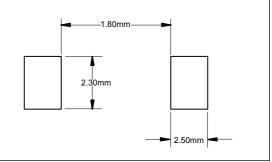
Note: 1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

# **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				
С	0.002	0.008	0.05	0.20				
D	0.006	0.012	0.15	0.31				
E	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**

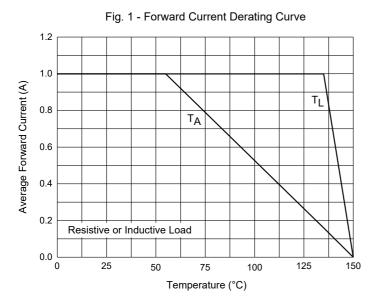


Fig. 3 - Typical Instantaneous Forward Characteristics

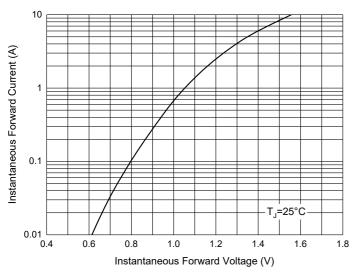


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

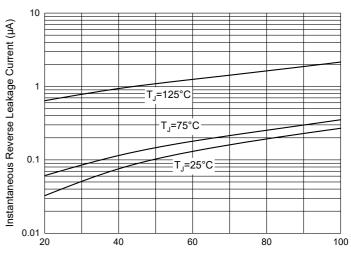
40

35

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	
Part Number-TP	Tape&Reel: 3Kpcs/Reel	

Note: Adding "-HF" Suffix For Halogen Free, eg. MURS1JBL-TP-HF

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