

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
- Typical Thermal Resistance: 20°C/W Junction to Lead^(Note3)
- Typical Thermal Resistance: 60°C/W Junction to Ambient^(Note3)

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURS1JAFL	UR1JL	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

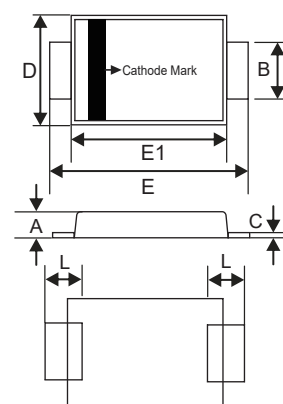
Average Forward Current	$I_{F(AV)}$	1.0A	$T_L=120^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.4V(Max) 1.2V(Typ)	$I_{FM}=1.0A$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0μA	$T_J=25^\circ\text{C}$
Maximum Reverse Recovery Time	t_{rr}	35ns	$I_F=0.5A$; $I_R=1.0A$; $I_{rr}=0.25A$
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz $V_R=4.0V$

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.
3. Mounted on P.C.B. With 0.2" x 0.2" (5.0 mm x 5.0 mm) Copper Pad Areas.

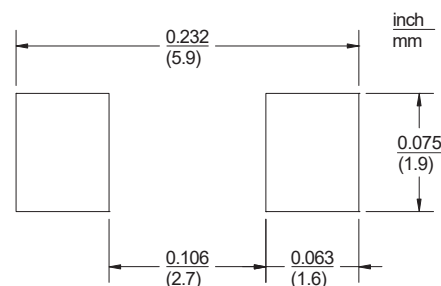
1 Amp Super Fast Recovery Rectifier 600 Volts

DO-221AC(SMA-FL)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.035	0.049	0.90	1.25	
B	0.049	0.065	1.25	1.65	
C	0.004	0.016	0.10	0.40	
D	0.089	0.116	2.25	2.95	
E	0.173	0.220	4.40	5.60	
E1	0.126	0.181	3.20	4.60	
L	0.020	0.059	0.50	1.50	

SUGGESTED SOLDER PAD LAYOUT



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

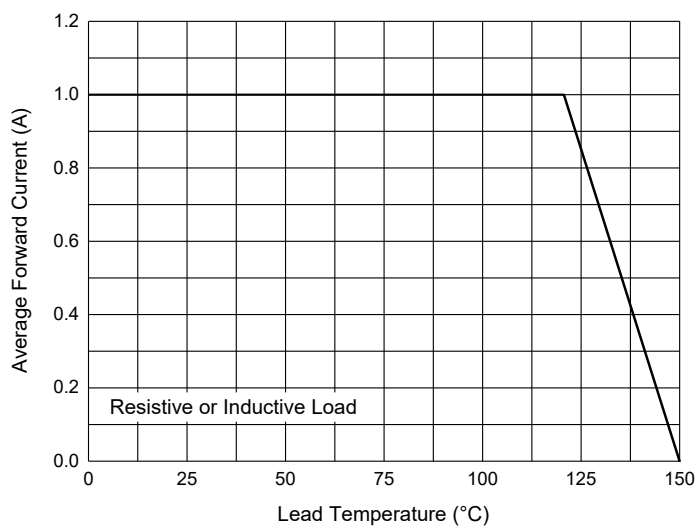


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

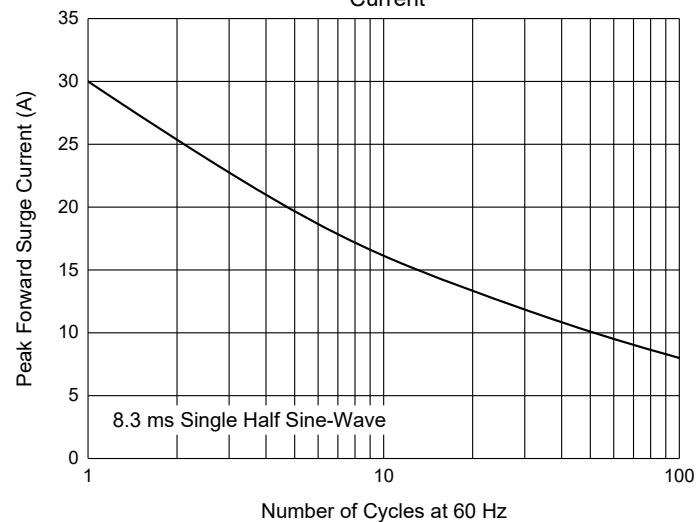


Fig. 3 - Typical Instantaneous Forward Characteristics

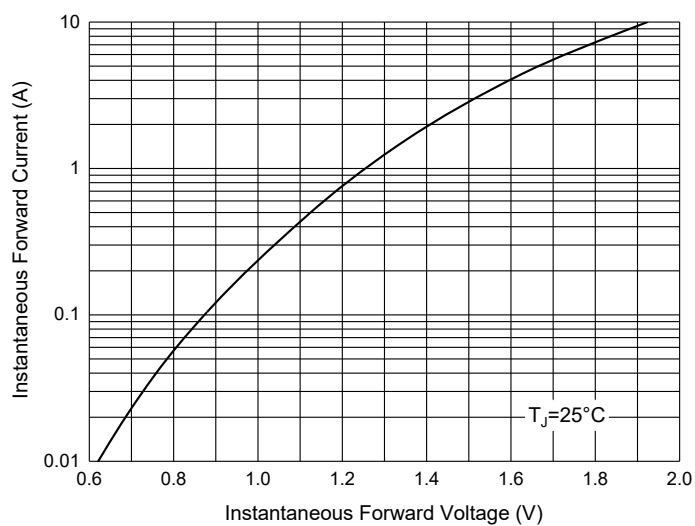
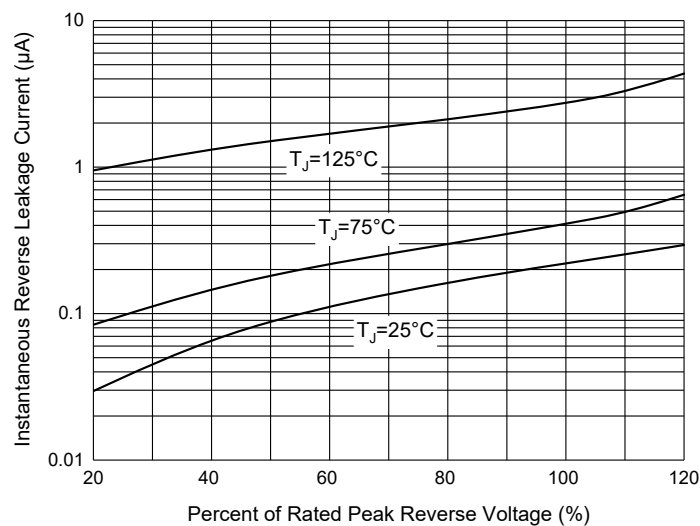


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
MURS1JAFL-TP	Tape&Reel: 10Kpcs/Reel

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