

Features

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates Compliant. See Ordering Information)
- Glass Passivated Chip
- Ultra Fast Switching For High Efficiency
- For Surface Mounted Applications
- High Current Capability
- Low Reverse Leakage Current
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -50°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 RMS Voltage	Maximum DC Blocking Voltage
US2AFL	US2A	50V	35V	50V
US2BFL	US2B	100V	70V	100V
US2CFL	US2C	150V	105V	150V
US2DFL	US2D	200V	140V	200V
US2GFL	US2G	400V	280V	400V
US2JFL	US2J	600V	420V	600V
US2KFL	US2K	800V	560V	800V
US2MFL	US2M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

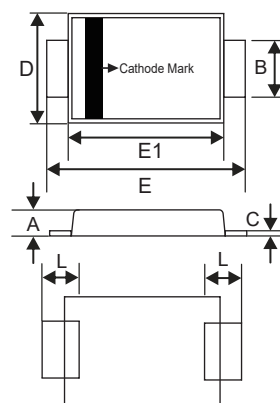
Average Forward Current	$I_{F(AV)}$	2.0A	$T_L=110^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	50A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage US2AFL-US2DFL US2GFL US2JFL-US2MFL	V_F	1.0V 1.4V 1.7V	$I_{FM}=1.0\text{A};$ $T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0μA 350μA	$T_J=25^\circ\text{C};$ $T_J=125^\circ\text{C}$
Maximum Reverse Recovery Time US2AFL-US2GFL US2JFL-US2MFL	t_{rr}	50ns 75ns	$I_F=0.5\text{A}; I_R=1.0\text{A};$ $I_{RR}=0.25\text{A}$
Typical Junction Capacitance	C_J	28pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

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.

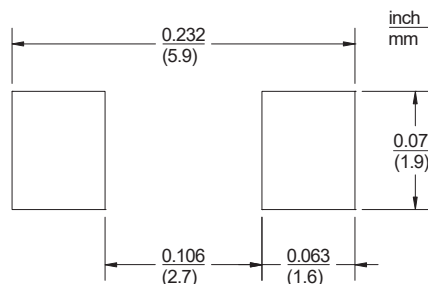
2 Amp Ultra Fast Rectifier 50 to 1000 Volts

DO-221AC(SMA-FL)



DIMENSIONS					
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

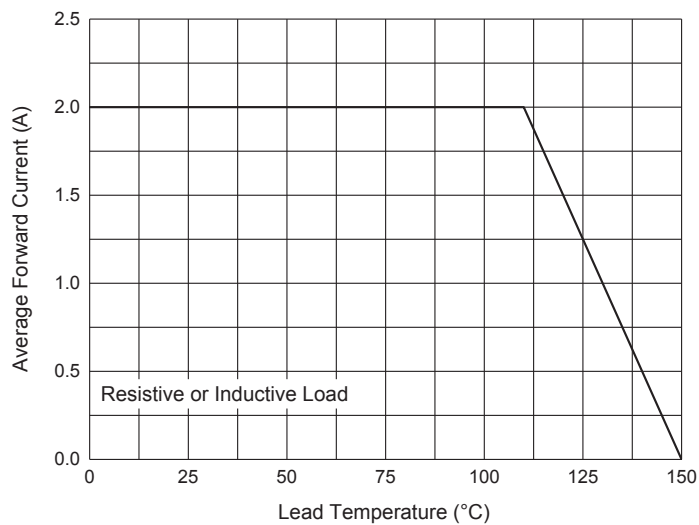


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

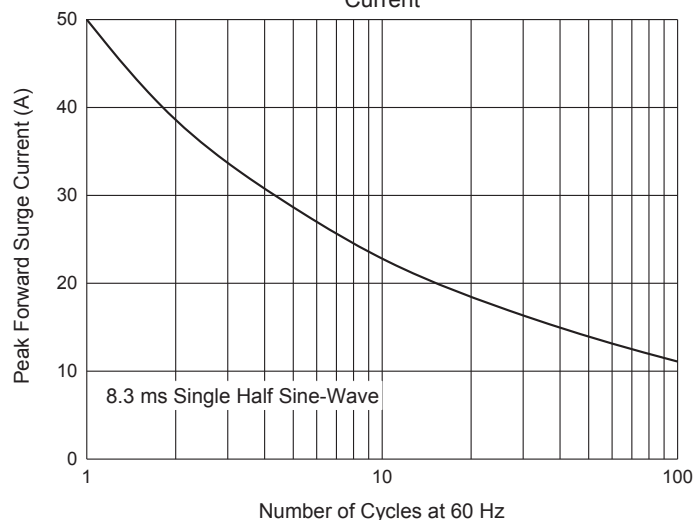


Fig. 3 - Typical Instantaneous Forward Characteristics

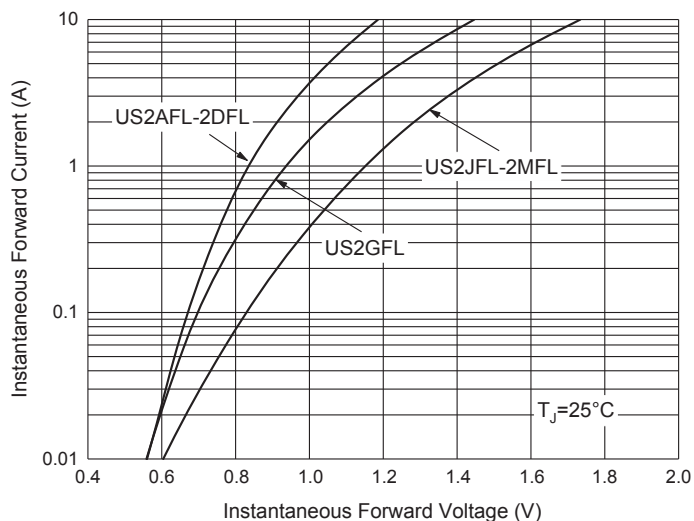
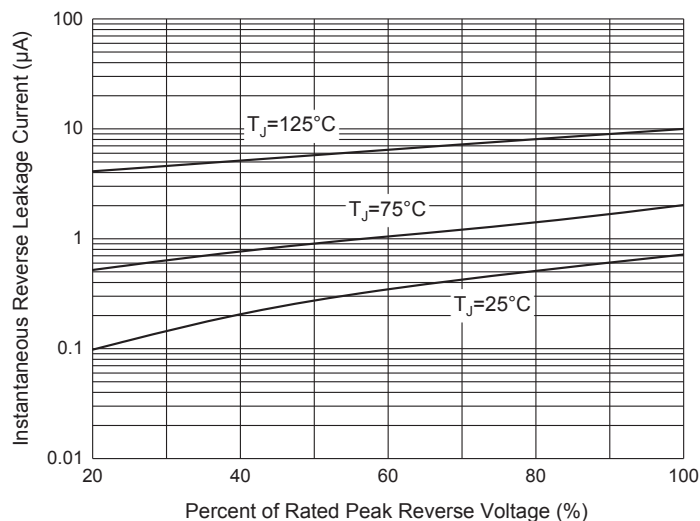


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

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