

## Features

- Low Profile Package
- Ideal For Automated Placement
- Glass Passivated Chip Junction
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## Maximum Ratings

- Operating Junction Temperature Range: -55°C To +150°C
- Storage Temperature Range: -55°C To +150°C
- Typical Thermal Resistance: 70°C/W Junction To Ambient
- Typical Thermal Resistance: 25°C/W Junction To Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FS1AFL	FS1A	50V	35V	50V
FS1BFL	FS1B	100V	70V	100V
FS1DFL	FS1D	200V	140V	200V
FS1GFL	FS1G	400V	280V	400V
FS1JFL	FS1J	600V	420V	600V
FS1KFL	FS1K	800V	560V	800V
FS1MFL	FS1M	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

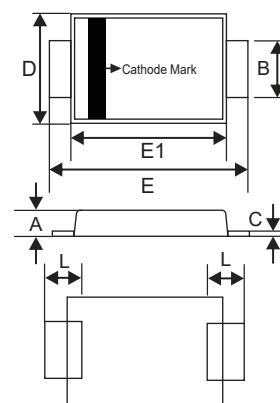
Average Forward Current	$I_{F(AV)}$	1.0A	$T_L=110^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.3V	$I_{FM}=1.0A$ ; $T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 100 $\mu\text{A}$	$T_A=25^\circ\text{C}$ ; $T_A=125^\circ\text{C}$
Maximum Reverse Recovery Time FS1AFL-FS1GFL FS1JFL FS1KFL-FS1MFL	$t_{rr}$	150ns 250ns 500ns	$I_F=0.5A$ ; $I_R=1.0A$ , $I_{RR}=0.25A$

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.

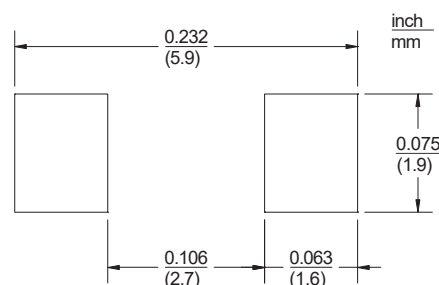
# 1 Amp Fast Recovery Rectifier 50 to 1000 Volts

## 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

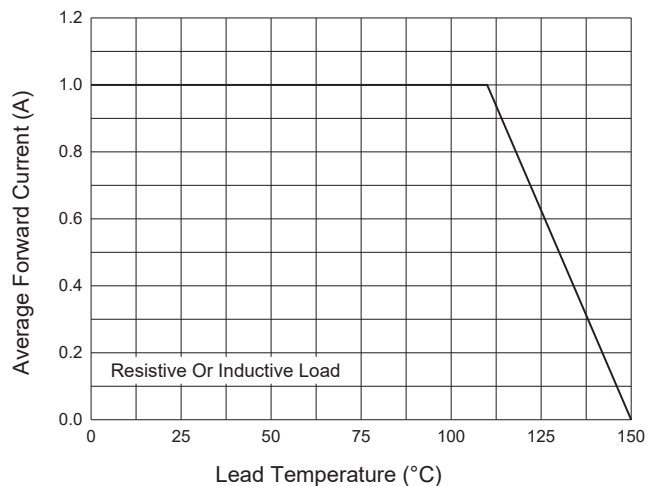


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

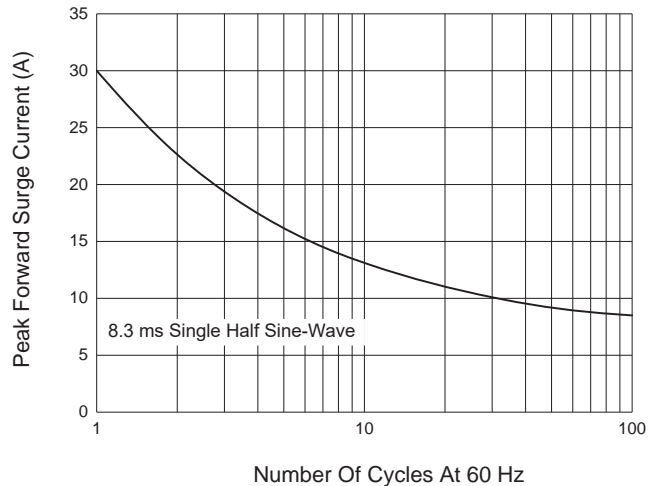


Fig. 3 - Typical Instantaneous Forward Characteristics

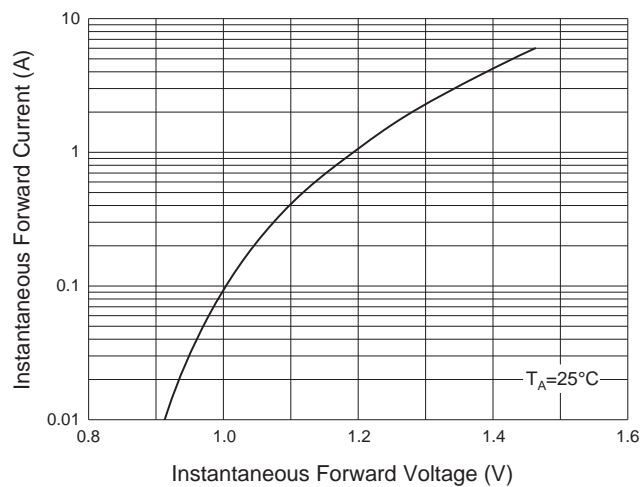
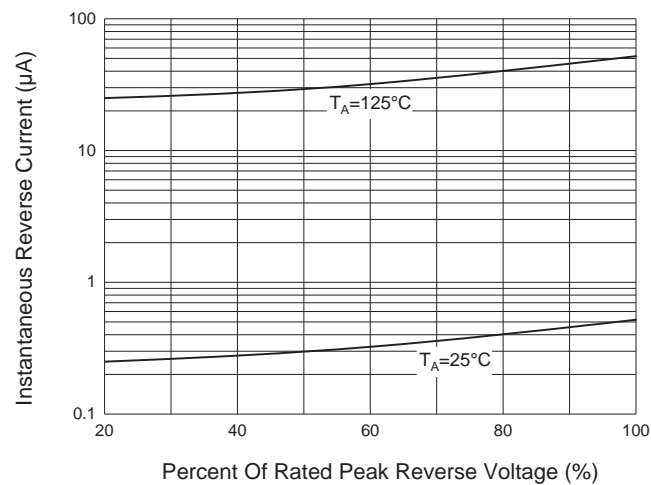


Fig. 4 - Typical Reverse Characteristics



## Ordering Information

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

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