

## Features

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

## Maximum Ratings

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Typical Thermal Resistance: 48°C/W Junction to Ambient
- Typical Thermal Resistance: 20°C/W Junction to Lead
- Typical Thermal Resistance: 12°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SF21G	SF21G	50V	35V	50V
SF22G	SF22G	100V	70V	100V
SF23G	SF23G	150V	105V	150V
SF24G	SF24G	200V	140V	200V
SF25G	SF25G	300V	210V	300V
SF26G	SF26G	400V	280V	400V
SF28G	SF28G	600V	420V	600V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

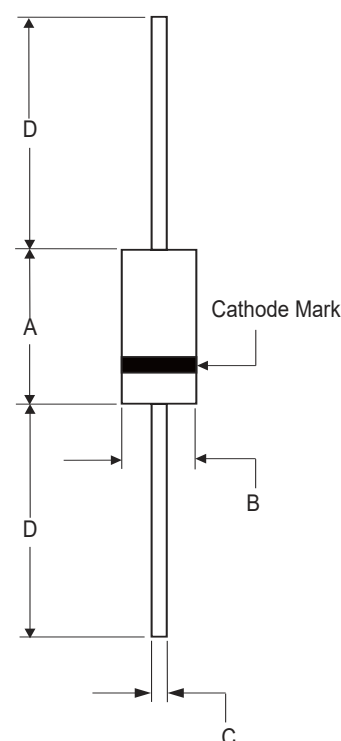
Average Forward Current	$I_{F(AV)}$	2.0A	$T_C=55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage SF21G-SF24G SF25G-SF26G SF28G	$V_F$	0.95V 1.3V 1.7V	$I_{FM}=2.0A$ ; $T_J=25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 100 $\mu\text{A}$	$T_J=25^\circ\text{C}$ ; $T_J=125^\circ\text{C}$
Maximum Reverse Recovery Time	$t_{rr}$	35ns	$I_F=0.5A$ ; $I_R=1.0A$ ; $I_{RR}=0.25A$
Typical Junction Capacitance SF21G-SF24G SF25G-SF28G	$C_J$	60pF 30pF	Measured at 1.0MHz $V_R=4.0V$

\*Pulse Test: Pulse Width 300 usec, Duty Cycle 1%.

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

# 2.0 Amp Super Fast Glass Passivated Rectifier 50 to 600 Volts

## DO-15



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.230	0.300	5.80	7.60	
B	0.104	0.140	2.60	3.60	
C	0.026	0.035	0.70	0.90	
D	1.000	----	25.40	----	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

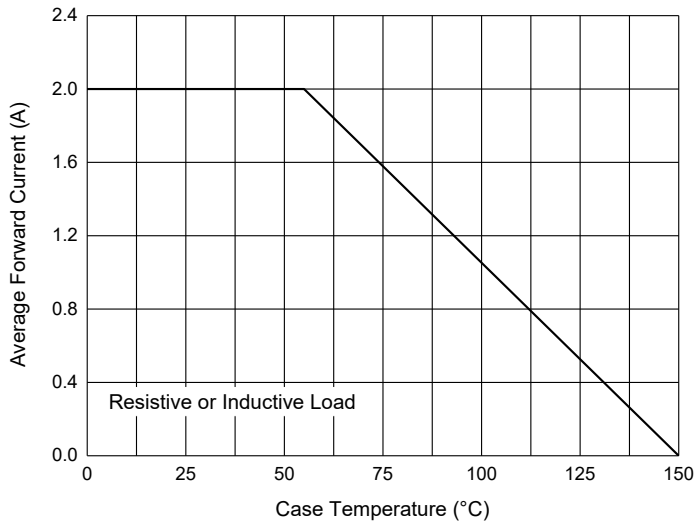


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

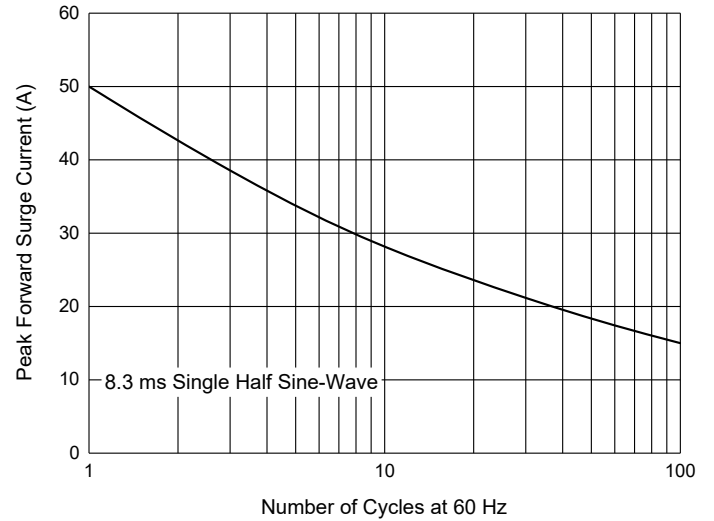


Fig. 3 - Typical Instantaneous Forward Characteristics

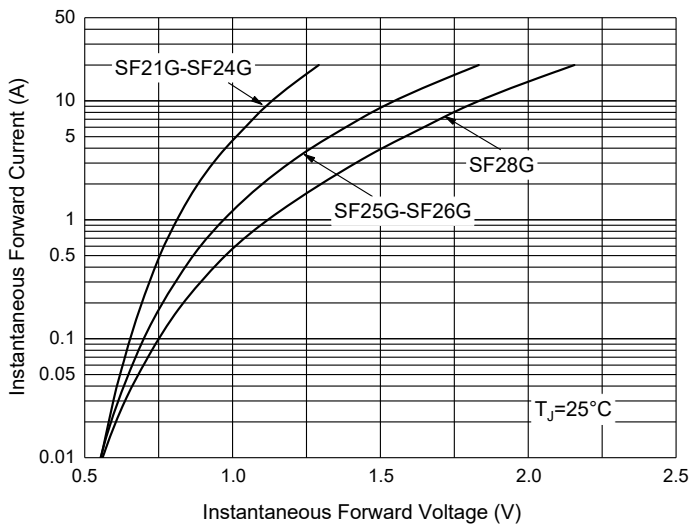
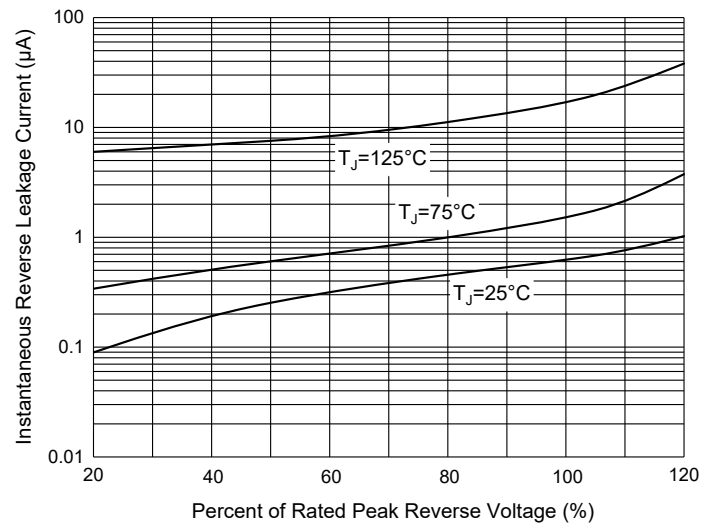


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 4Kpcs/Reel
Part Number-BP	Bulk: 25Kpcs/Carton

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

### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.