



Micro Commercial Components

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# SF21G THRU SF26G

## Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- High reliability
- High current capability
- Low forward voltage drop
- High surge capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C
- For capacitive load, derate current by 20%

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

## Electrical Characteristics @ 25°C Unless Otherwise Specified

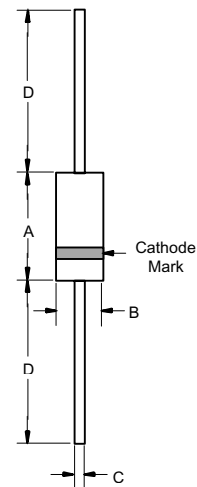
Average Forward Current	$I_{F(AV)}$	2.0A	$T_C = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SF21G-SF24G SF25G-SF26G	$V_F$	0.95V 1.3V	$I_{FM} = 2.0A$ ; $T_a = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage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

\*Pulse Test: Pulse width 300 usec, Duty cycle 1%.

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

## 2.0 Amp Super Fast Glass Passivated Rectifier 50 to 400 Volts

DO-15



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.230	.300	5.80	7.60	
B	.104	.140	2.60	3.60	
C	.026	.034	.70	.90	
D	1.000	---	25.40	---	

# SF21G thru SF26G



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Figure 1  
Typical Reverse Characteristics

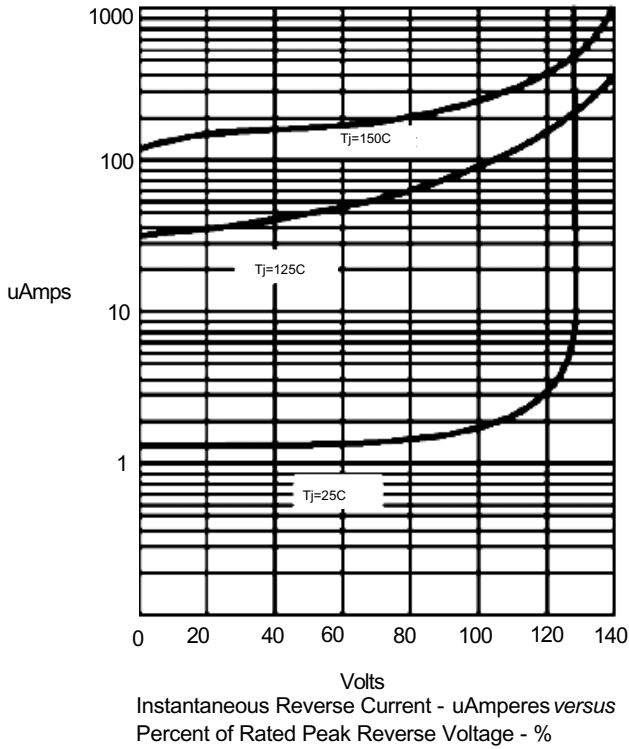


Figure 2  
Typical Forward Characteristics

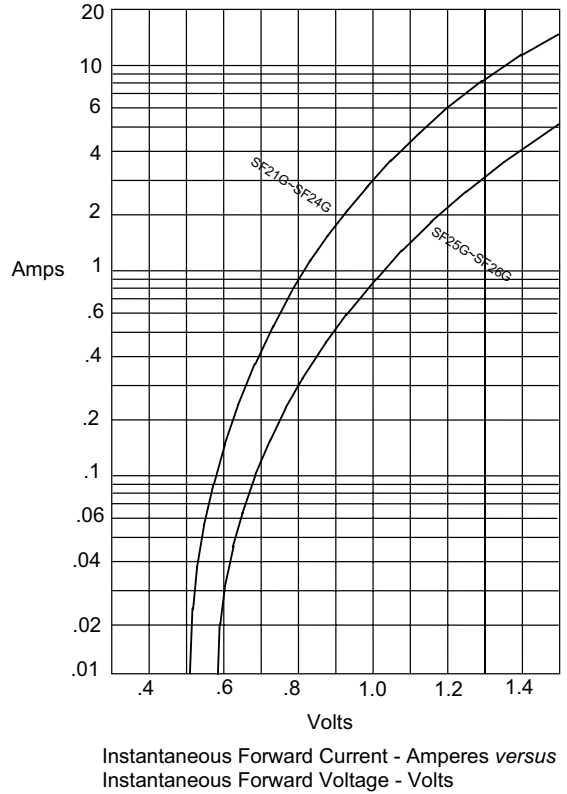
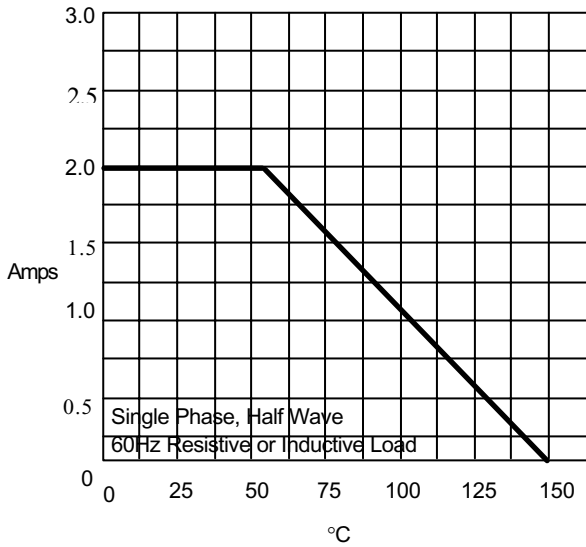


Figure 3  
Forward Derating Curve

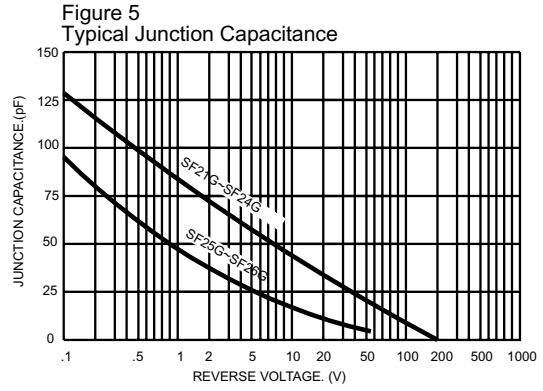
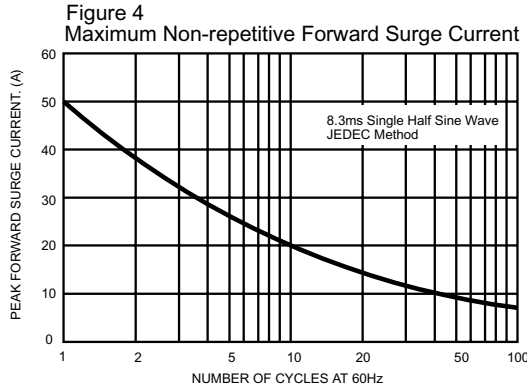


Average Forward Rectified Current Per Leg - Amperes versus Case Temperature -  $^\circ\text{C}$

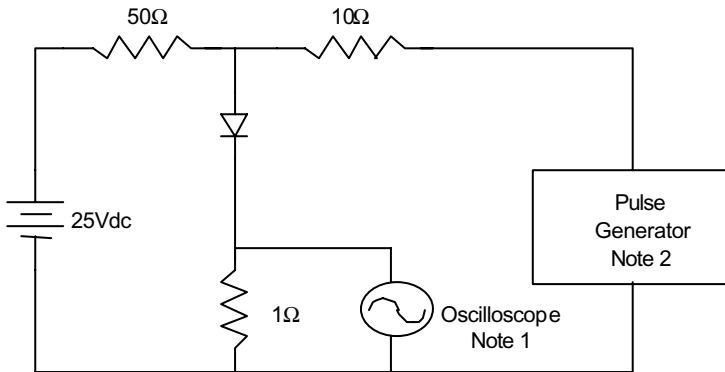
# SF21G thru SF26G



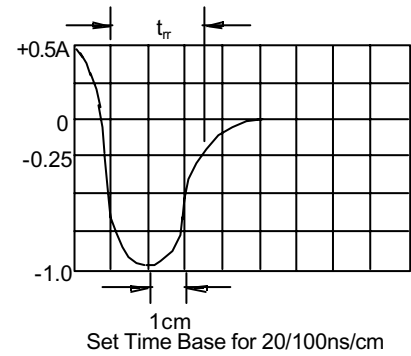
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**Figure 6**  
Reverse Recovery Time Characteristic And Test Circuit Diagram



- Notes:
1. Rise Time = 7ns max.  
Input impedance = 1 megohm, 22pF
  2. Rise Time = 10ns max.  
Source impedance = 50 ohms
  3. Resistors are non-inductive





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### Ordering Information :

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

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