

Micro Commercial Components 20736 Marilla Street Chatsworth **Micro Commercial Components** 

CA 91311

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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
  Halogen free available upon request by adding suffix "-HF"
  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

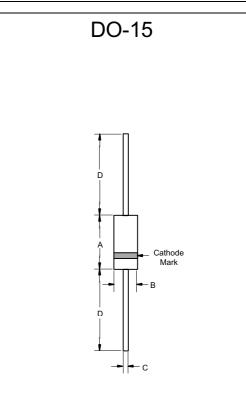
### **Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	I <sub>F(AV)</sub>	2.0A	T <sub>C</sub> = 55°C
Peak Forward Surge Current	I <sub>FSM</sub>	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SF21G-SF24G SF25G-SF26G	V <sub>F</sub>	0.95V 1.3V	I <sub>FM</sub> = 2.0A; T <sub>a</sub> = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0uA 100uA	$T_C = 25^{\circ}C$ $T_C = 125^{\circ}C$
Typical Junction Capacitance SF21G-SF24G SF25G-SF26G	CJ	60pF 30pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V
Maximum Reverse Recovery Time	$T_{RR}$	35nS	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>RR</sub> =0.25A

<sup>\*</sup>Pulse Test: Pulse width 300 usec, Duty cycle 1%.

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

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



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.230	.300	5.80	7.60	
В	.104	.140	2.60	3.60	
O	.026	.034	.70	.90	
D	1.000		25.40		
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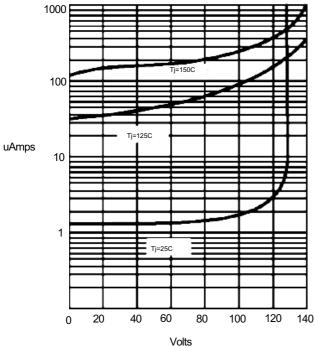
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# SF21G thru SF26G

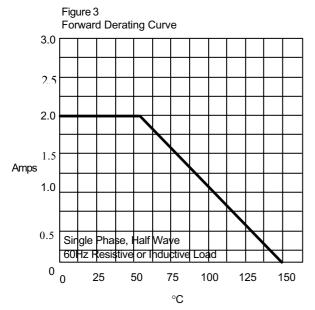


#### **Micro Commercial Components**

Figure 1
Typical Reverse Characteristics

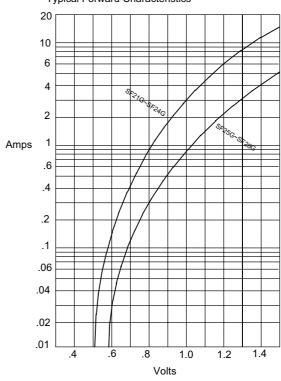


Instantaneous Reverse Current - uAmperes versus Percent of Rated Peak Reverse Voltage - %



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



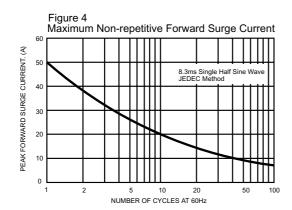


Instantaneous Forward Current - Amperes *versus* Instantaneous Forward Voltage - Volts

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# SF21G thru SF26G





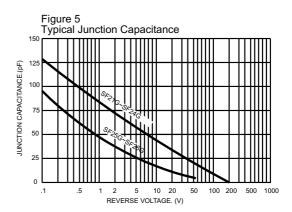
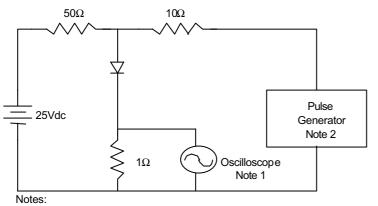
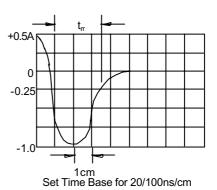


Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram





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



### Micro Commercial Components

### **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

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