



Micro Commercial Components

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SF21G THRU SF28G

2.0 Amp Super Fast Glass Passivated Rectifier 50 to 600 Volts

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
SF28G	600V	420V	600V

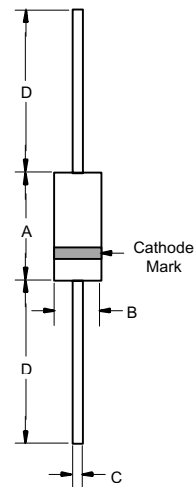
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0A	$T_C = 55^\circ C$
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	$I_{FM} = 2.0A;$ $T_a = 25^\circ C^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0uA 100uA	$T_C = 25^\circ C$ $T_C = 125^\circ C$
Typical Junction Capacitance SF21G-SF24G SF25G-SF28G	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 : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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	---	

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Figure 1
Typical Reverse Characteristics

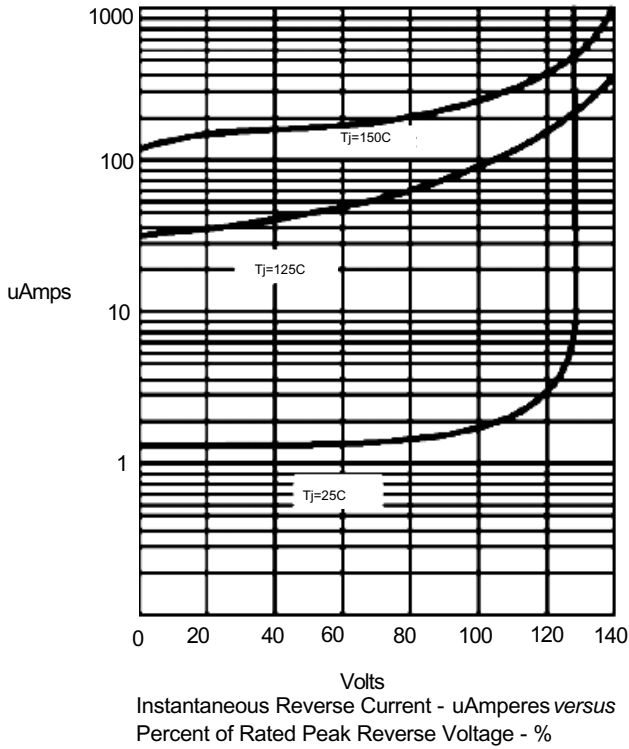
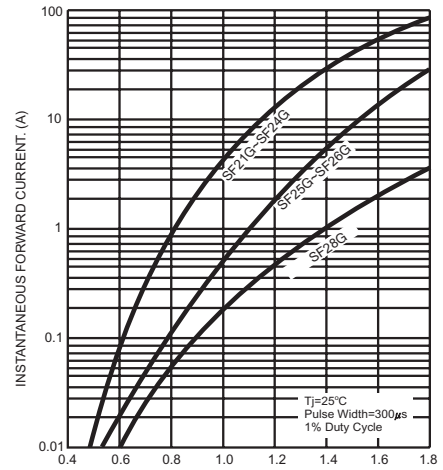
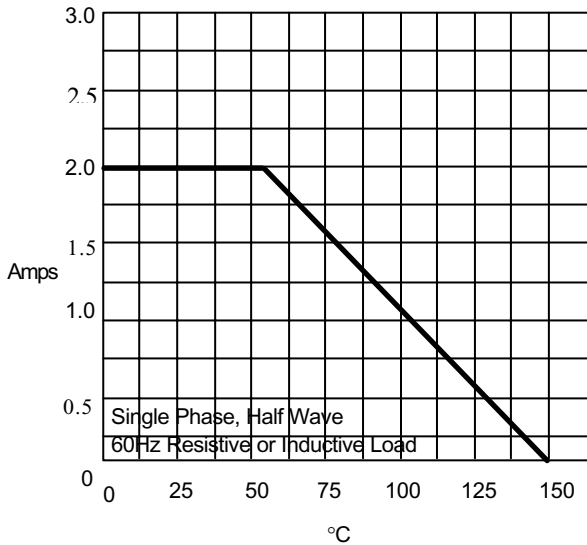


Figure 2
Typical Forward Characteristics



Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current Per Leg - Amperes versus Case Temperature - °C

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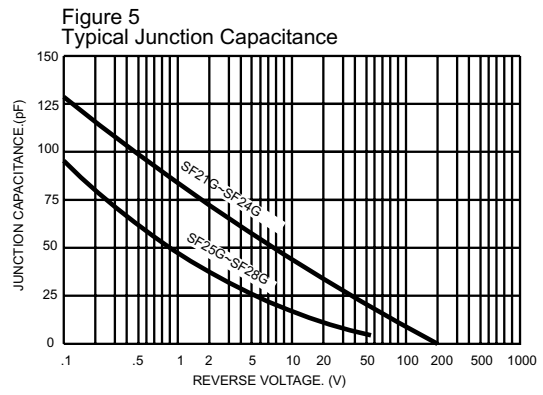
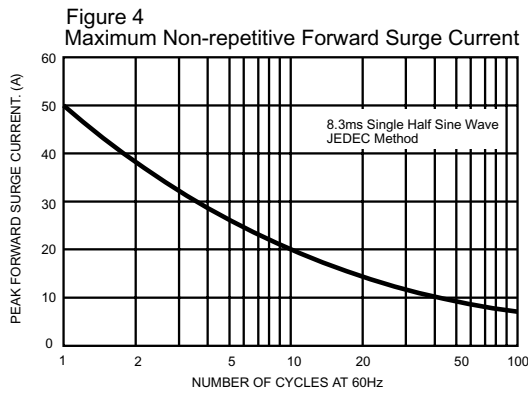
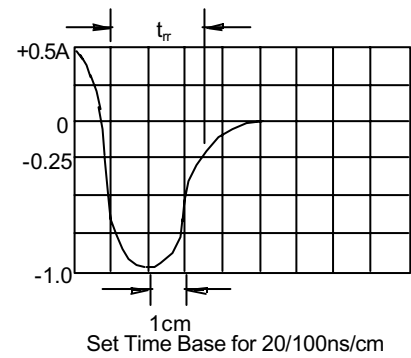
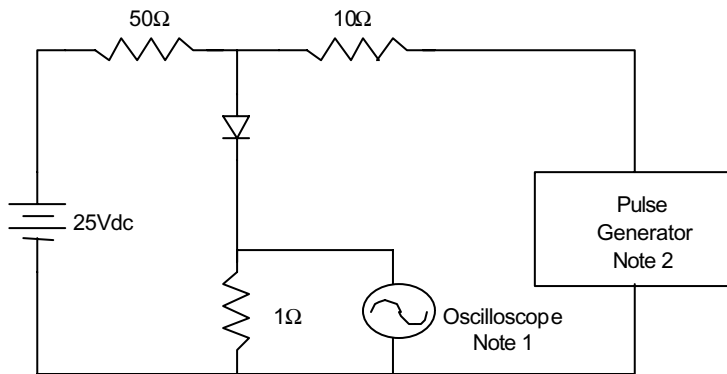


Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram



- 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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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