



**Glass Passivated Super Fast Rectifiers  
Reverse Voltage 50 to 600 Volts Forward Current 2.0 Amperes**

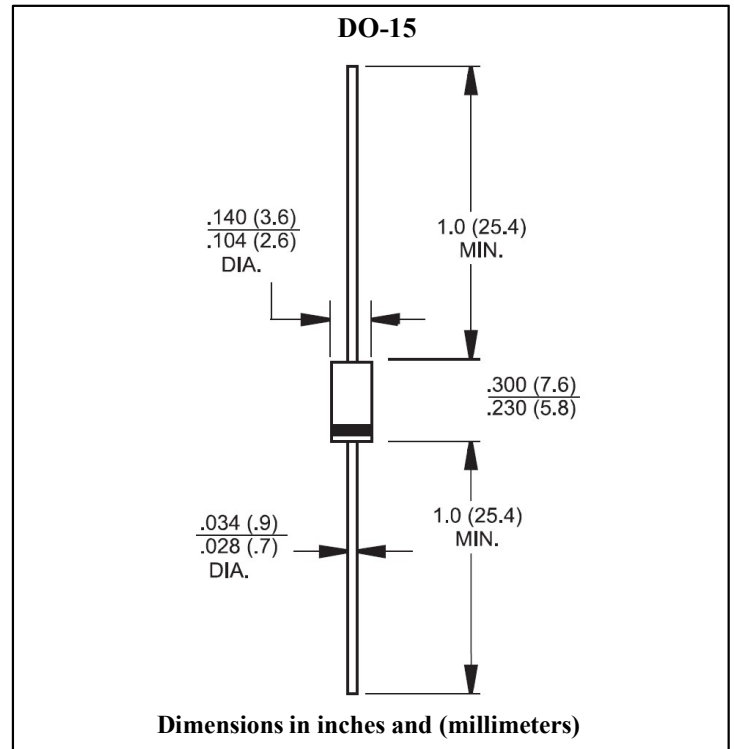
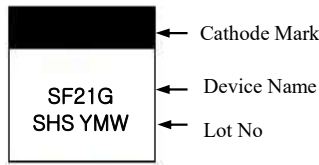
**Features**

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

**Mechanical Data**

- Case : Molded plastic
- Epoxy : UL 94V-O rate flame retardant
- Lead : Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity : Color band denotes cathode end
- High temperature soldering guaranteed : 260°C/10 seconds /0.375", (9.5mm) lead lengths at 5lbs., (2.3kg) tension
- Weight : 0.40gram

**Marking**



**Maximum Ratings & Electrical Characteristics**

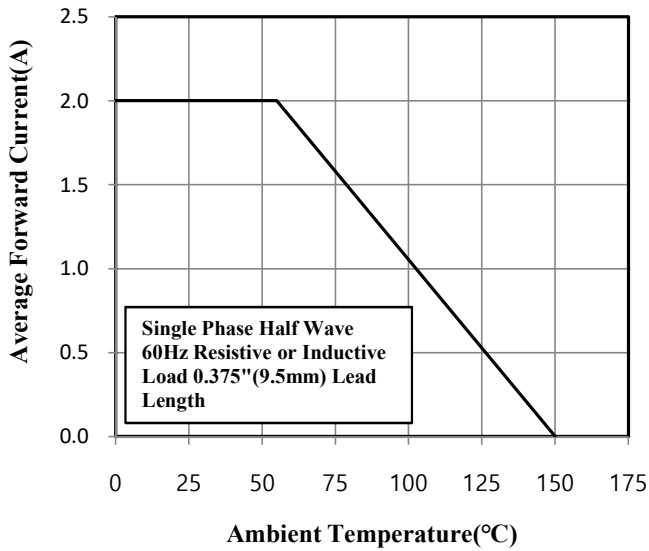
Ratings at 25°C ambient temperature unless otherwise specified  
Single phase half wave 60 HZ, resistive or inductive load  
For capacitive load, derate current by 20%

Parameter	Symbol	SF 21G	SF 22G	SF 23G	SF 24G	SF 25G	SF 26G	SF 27G	SF 28G	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	150	200	300	400	500	600	V	
Maximum RMS Voltage	$V_{RMS}$	35	70	105	140	210	280	350	420	V	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	150	200	300	400	500	600	V	
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length	$I_F(AV)$	2.0								A	$T_a=55^\circ C$
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	50								A	
Maximum Instantaneous Forward Voltage @ 2.0A	$V_F$	1.0			1.3		2.0			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5.0								uA	$T_a=25^\circ C$
		100								uA	$T_a=125^\circ C$
Maximum Reverse Recovery Time	$t_{rr}$	35								ns	Note 1
Typical Junction Capacitance	$C_j$	40				20				pF	Note 2
Typical Thermal Resistance	$R_{th(j-a)}$	65								$^\circ C / W$	Note 3
Operation Junction Temperature Range	$T_j$	-55 to +150								$^\circ C$	
Storage Temperature Range	$T_{STG}$	-55 to +150								$^\circ C$	

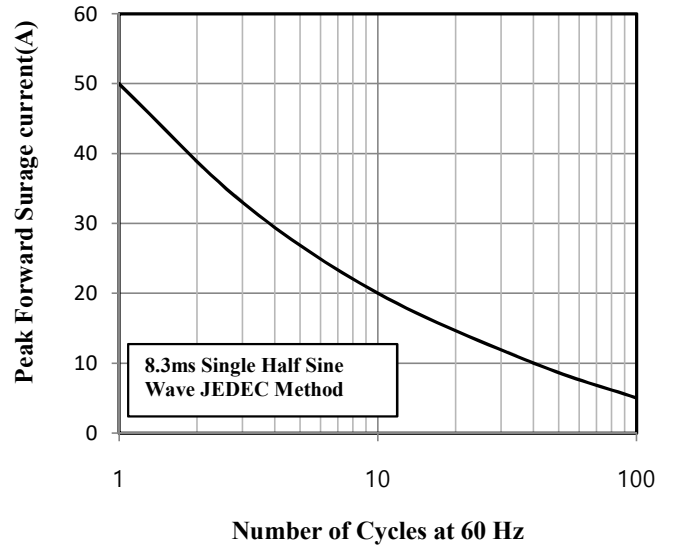
Note 1. Reverse Recovery Test Conditions :  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$   
 Note 2. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.  
 Note 3. Mount on Cu-Pad Size 10mm×10mm on P.C.B.

**Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)**

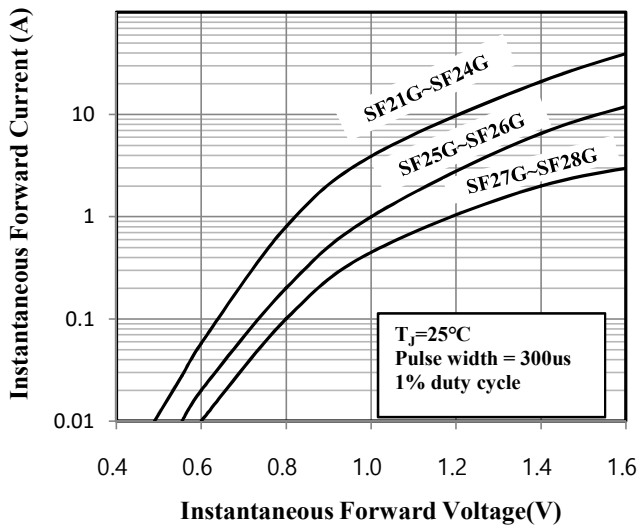
**Fig.1 Forward Current Derating Curve**



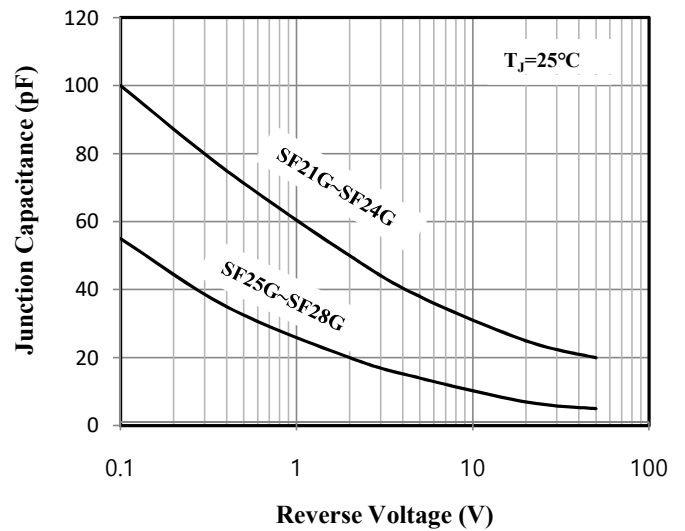
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



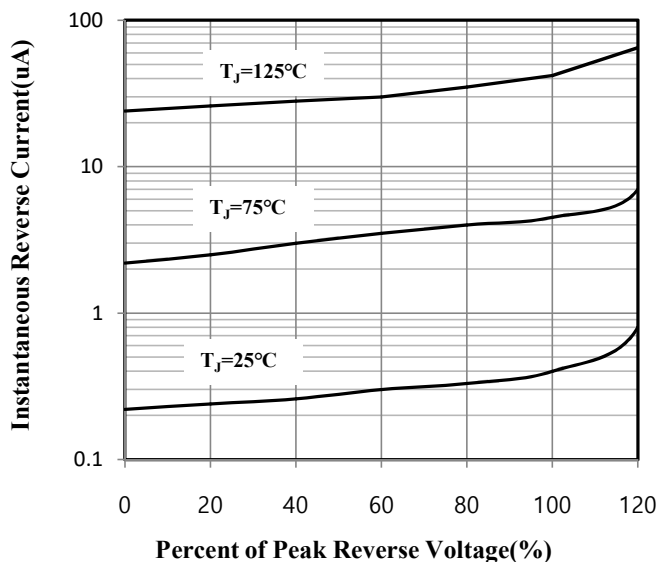
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Typical Reverse Characteristics**



**Fig. 6 Reverse Recovery Time Characteristic and Test Circuit Diagram**

