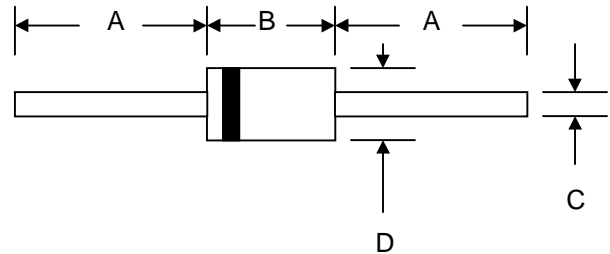


### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability



### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.40 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

DO-15		
Dim	Min	Max
A	25.4	—
B	5.50	7.62
C	0.71	0.864
D	2.60	3.60
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

Characteristic	Symbol	SF21	SF22	SF23	SF24	SF25	SF26	SF27	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	150	200	300	400	600	V	
Working Peak Reverse Voltage	$V_{RWM}$									
DC Blocking Voltage	$V_R$									
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	210	280	420	V	
Average Rectified Output Current (Note 1) @ $T_A = 55^\circ\text{C}$	$I_O$	2.0							A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50							A	
Forward Voltage @ $I_F = 2.0\text{A}$	$V_{FM}$	0.95			1.3		1.7		V	
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	5.0				100				$\mu\text{A}$
Reverse Recovery Time (Note 2)	$t_{rr}$	35							nS	
Typical Junction Capacitance (Note 3)	$C_j$	60				30				pF
Operating Temperature Range	$T_j$	-65 to +125							$^\circ\text{C}$	
Storage Temperature Range	$T_{STG}$	-65 to +150							$^\circ\text{C}$	

**\*Glass passivated forms are available upon request**

- Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case  
 2. Measured with  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $IRR = 0.25\text{A}$ . See figure 5.  
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

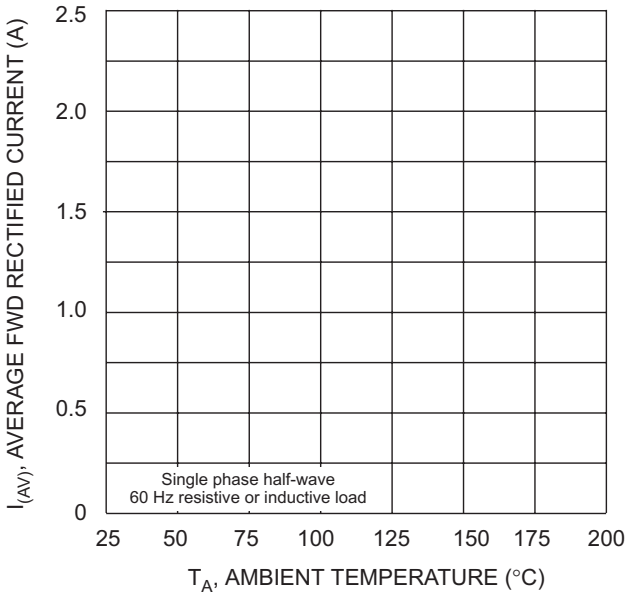


Fig. 1 Forward Current Derating Curve

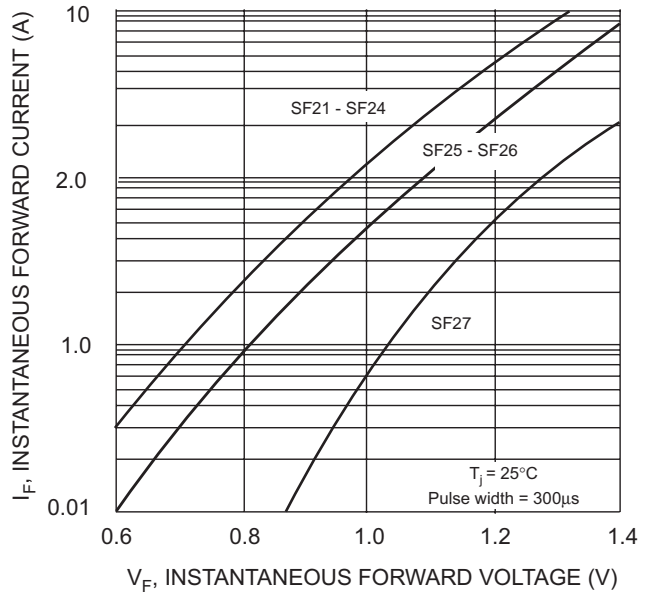


Fig. 2 Typical Forward Characteristics

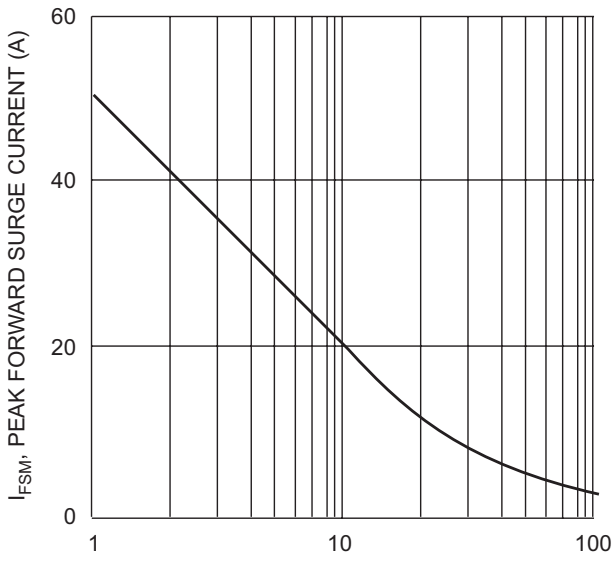


Fig. 3 Peak Forward Surge Current

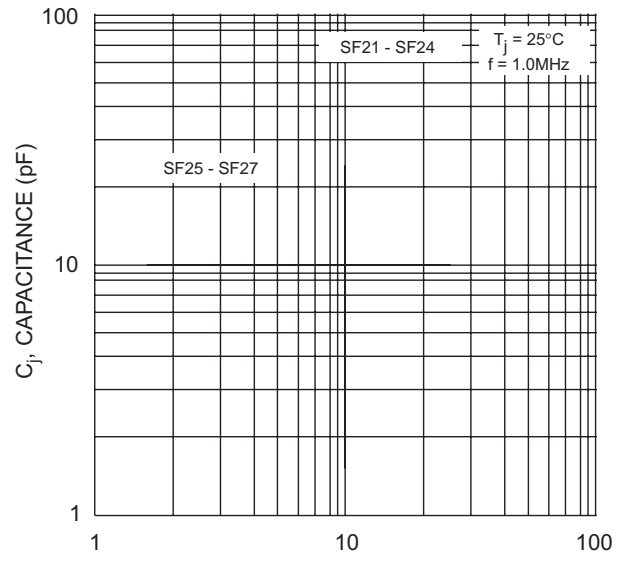
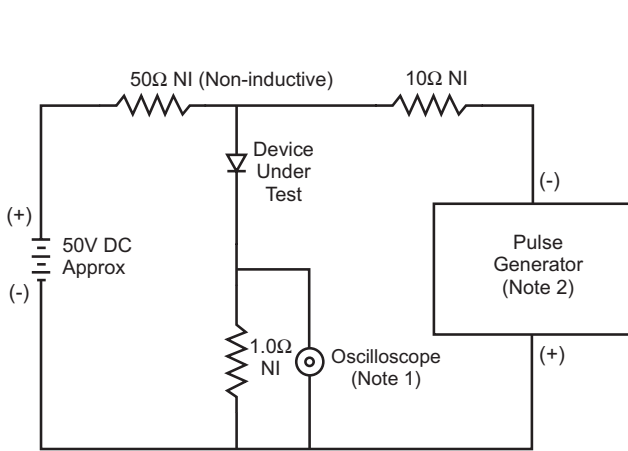
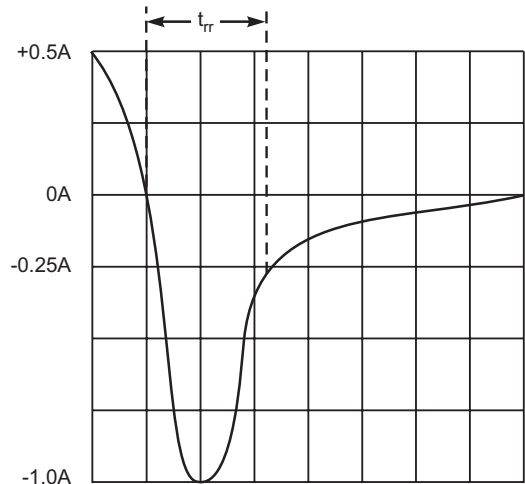


Fig. 4 Typical Junction Capacitance



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
  2. Rise Time = 10ns max. Input Impedance = 50Ω.



Set time base for 5/10ns/cm

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

## ORDERING INFORMATION

Product No.◆	Package Type	Shipping Quantity
SF21-T3	DO-15	4000/Tape & Reel
<b>SF21-TB</b>	DO-15	3000/Tape & Box
SF21	DO-15	1000 Units/Box
SF22-T3	DO-15	4000/Tape & Reel
<b>SF22-TB</b>	DO-15	3000/Tape & Box
SF22	DO-15	1000 Units/Box
SF23-T3	DO-15	4000/Tape & Reel
<b>SF23-TB</b>	DO-15	3000/Tape & Box
SF23	DO-15	1000 Units/Box
SF24-T3	DO-15	4000/Tape & Reel
<b>SF24-TB</b>	DO-15	3000/Tape & Box
SF24	DO-15	1000 Units/Box
SF25-T3	DO-15	4000/Tape & Reel
<b>SF25-TB</b>	DO-15	3000/Tape & Box
SF25	DO-15	1000 Units/Box
SF26-T3	DO-15	4000/Tape & Reel
<b>SF26-TB</b>	DO-15	3000/Tape & Box
SF26	DO-15	1000 Units/Box
SF27-T3	DO-15	4000/Tape & Reel
<b>SF27-TB</b>	DO-15	3000/Tape & Box
SF27	DO-15	1000 Units/Box

Products listed in **bold** are WTE **Preferred** devices.

◆T3 suffix refers to a 13" reel. TB suffix refers to Ammo Pack.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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