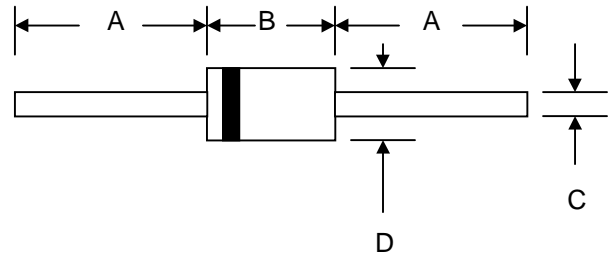


### Features

- 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: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Epoxy: UL 94V-O rate flame retardant

DO-201AD		
Dim	Min	Max
A	25.4	—
B	8.50	9.50
C	1.20	1.30
D	5.0	5.60
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	SF61	SF62	SF63	SF64	SF65	SF66	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$							
Working Peak Reverse Voltage	$V_{RWM}$	50	100	150	200	300	400	V
DC Blocking Voltage	$V_R$							
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	210	280	V
Average Rectified Output Current (Note 1)	$I_O$	6.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150						A
Forward Voltage @ $I_F = 6.0\text{A}$	$V_{FM}$	0.975				1.3		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)	$C_j$	120				60		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.

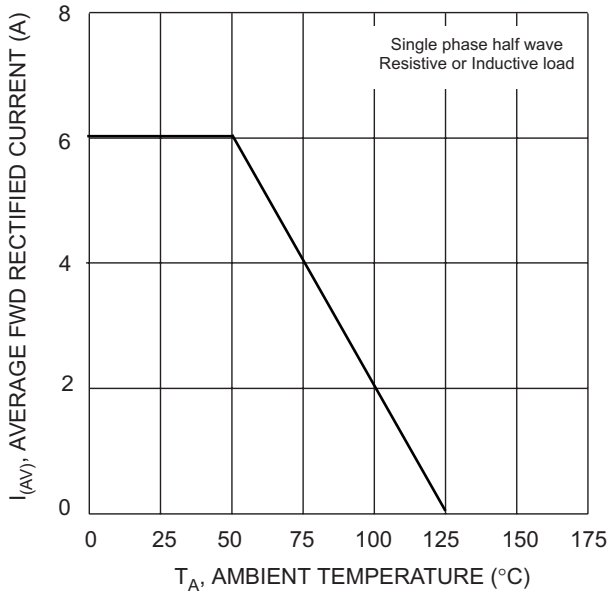


Fig. 1 Forward Current Derating Curve

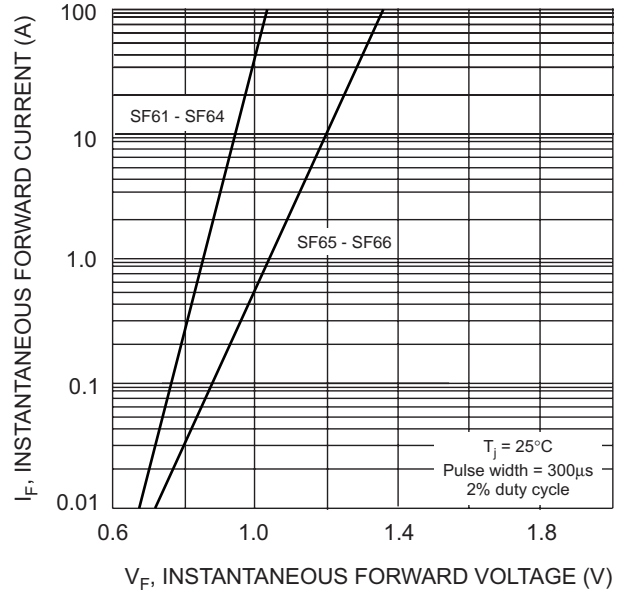


Fig. 2 Typical Forward Characteristics

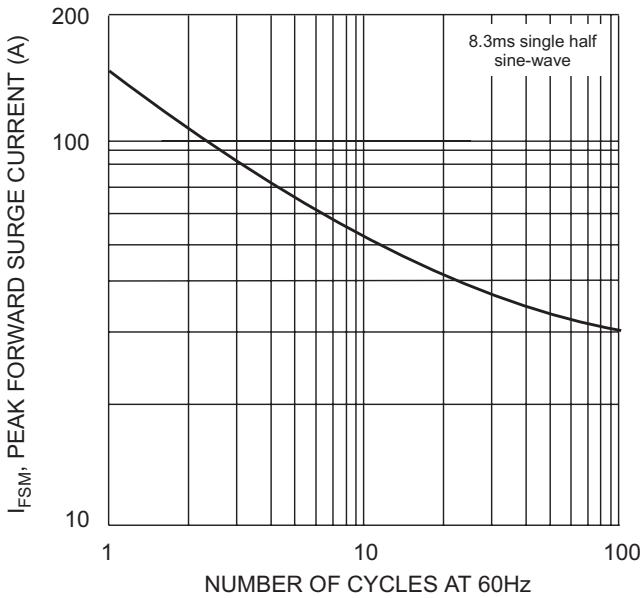


Fig. 3 Peak Forward Surge Current

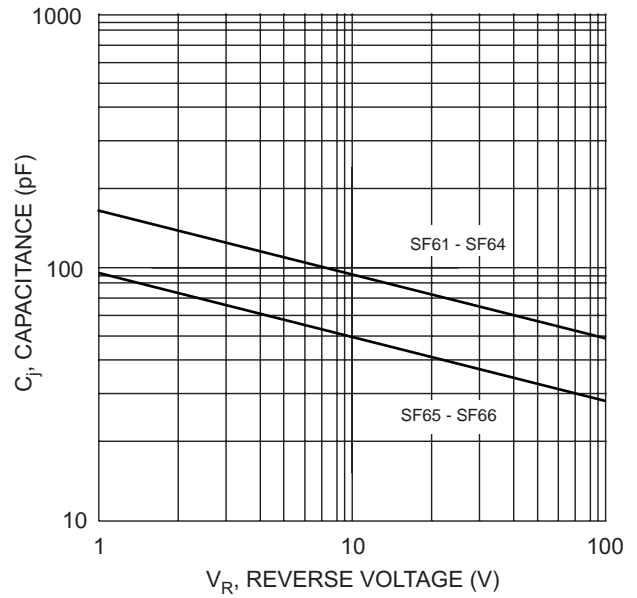
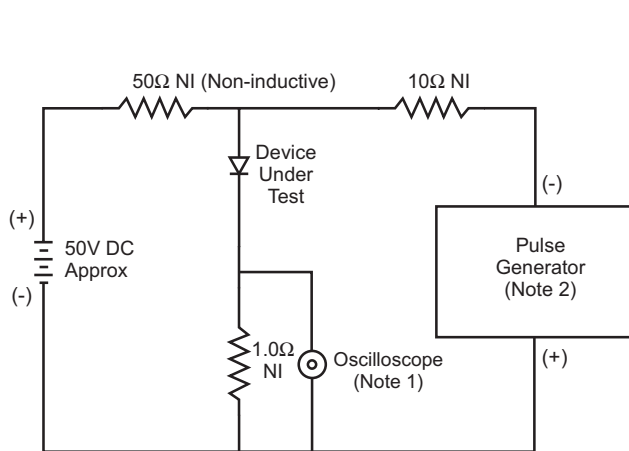
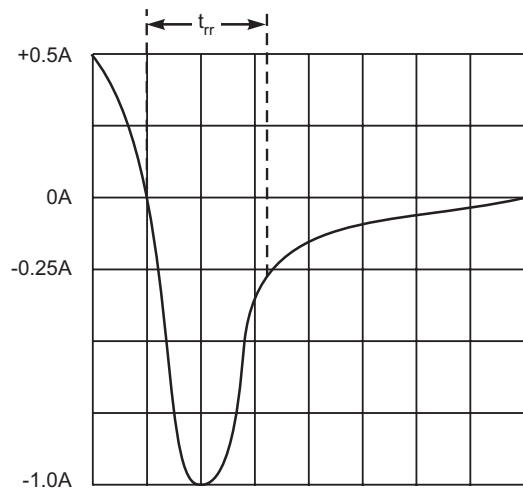


Fig. 4 Typical Junction Capacitance



- 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
SF61-T3	DO-201AD	1200/Tape & Reel
<b>SF61-TB</b>	DO-201AD	1200/Tape & Box
SF61	DO-201AD	500 Units/Box
SF62-T3	DO-201AD	1200/Tape & Reel
<b>SF62-TB</b>	DO-201AD	1200/Tape & Box
SF62	DO-201AD	500 Units/Box
SF63-T3	DO-201AD	1200/Tape & Reel
<b>SF63-TB</b>	DO-201AD	1200/Tape & Box
SF63	DO-201AD	500 Units/Box
SF64-T3	DO-201AD	1200/Tape & Reel
<b>SF64-TB</b>	DO-201AD	1200/Tape & Box
SF64	DO-201AD	500 Units/Box
SF65-T3	DO-201AD	1200/Tape & Reel
<b>SF65-TB</b>	DO-201AD	1200/Tape & Box
SF65	DO-201AD	500 Units/Box
SF66-T3	DO-201AD	1200/Tape & Reel
<b>SF66-TB</b>	DO-201AD	1200/Tape & Box
SF66	DO-201AD	500 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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**WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT.** WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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