

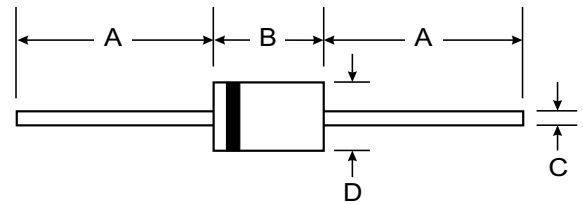
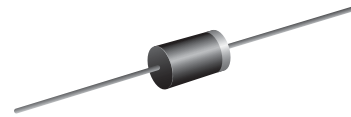
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 2.0 A**

### Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Super fast recovery time

### Mechanical Data

- Case : DO-15, Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.465 gram



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
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%.

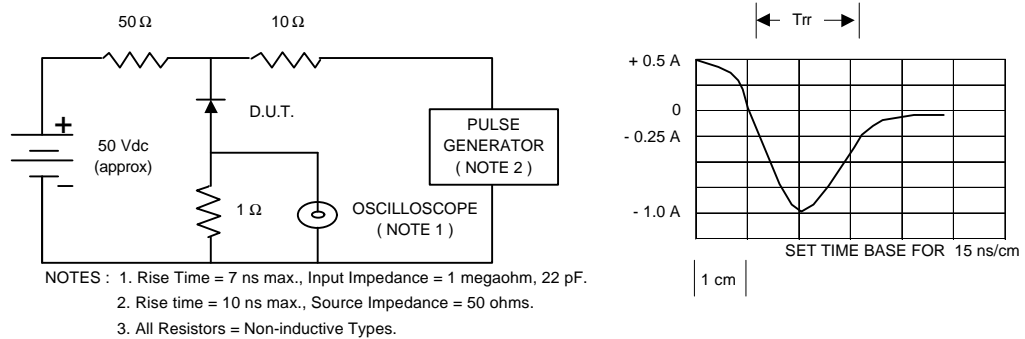
Characteristic	SYMBOL	SF21	SF22	SF23	SF24	SF25	SF26	SF27	SF28	SF29	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	600	800	1000	Volts
Maximum Average Forward Current 0.375"(9.5mm) Lead Length $T_a = 55^\circ\text{C}$	IF(AV)	2.0									Amps.
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	75									Amps.
Maximum Peak Forward Voltage at $I_F = 2.0\text{ A}$ .	V <sub>F</sub>	0.95			1.7			2.2		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5.0							20		$\mu\text{A}$
Maximum Reverse Recovery Time ( Note 1 )	T <sub>rr</sub>	35									ns
Typical Junction Capacitance ( Note 2 )	C <sub>J</sub>	50									pf
Junction Temperature Range	T <sub>J</sub>	- 65 to + 150									$^\circ\text{C}$
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 150									$^\circ\text{C}$

### Notes :

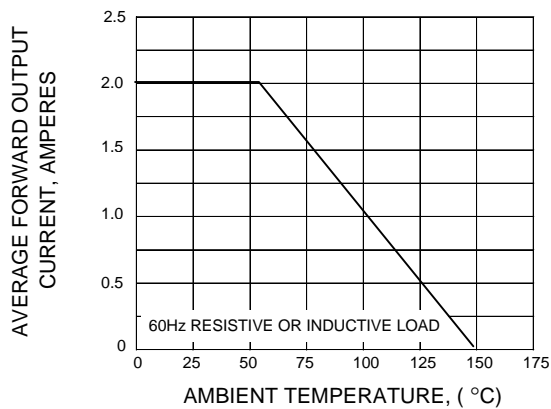
- ( 1 ) Reverse Recovery Test Conditions :  $I_F = 0.5\text{ A}$ ,  $I_R = 1.0\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .
- ( 2 ) Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC

## RATING AND CHARACTERISTIC CURVES ( SF21 - SF29 )

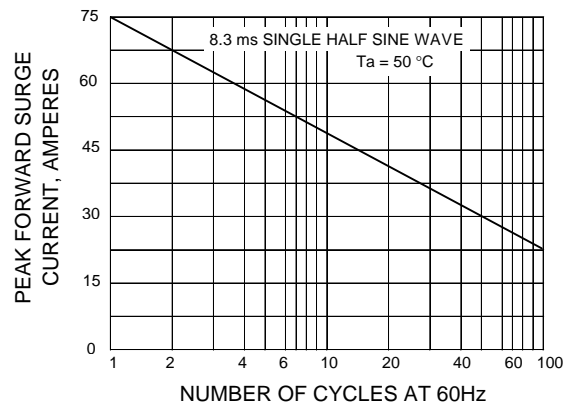
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



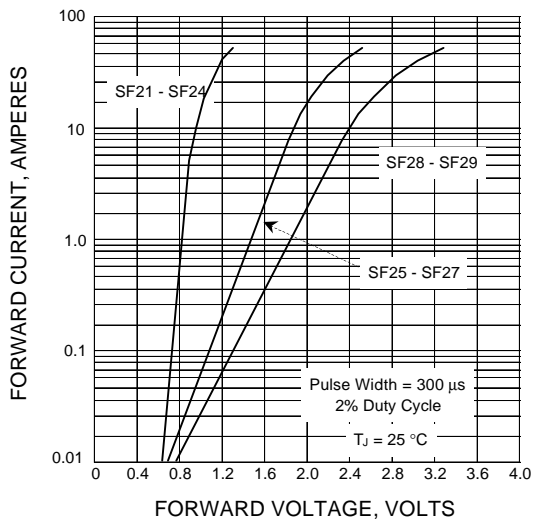
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

