

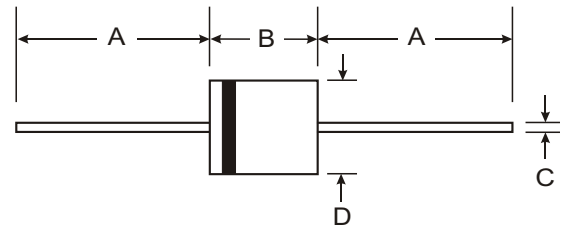
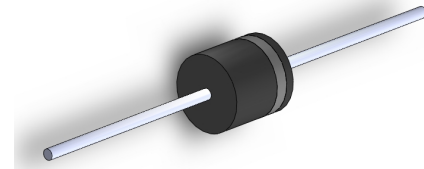
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 6.0 A**

### Features

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

### Mechanical Data

- Case : R-6 molded plastic body
- 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 : 2.1 grams



R-6		
Dim	Min	Max
A	25.4	—
B	8.6	9.1
C	1.2	1.3
D	8.6	9.1
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

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

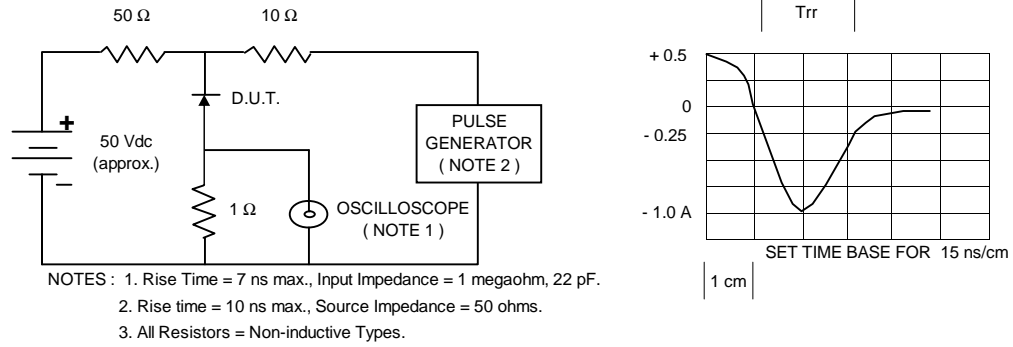
Characteristic	SYMBOL	SF61	SF62	SF63	SF64	SF65	SF66	SF67	SF68	SF69	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	150	200	300	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	105	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	150	200	300	400	600	800	1000	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length    T <sub>a</sub> = 55 °C	I <sub>F(AV)</sub>	6.0									A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150									A
Maximum Peak Forward Voltage at I <sub>F</sub> = 6.0 A.	V <sub>F</sub>	0.95			1.7			4.0			V
Maximum DC Reverse Current    T <sub>a</sub> = 25 °C at Rated DC Blocking Voltage    T <sub>a</sub> = 100 °C	I <sub>R</sub>	5									μA
	I <sub>R(H)</sub>	50									μA
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									°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 150									°C

#### Notes :

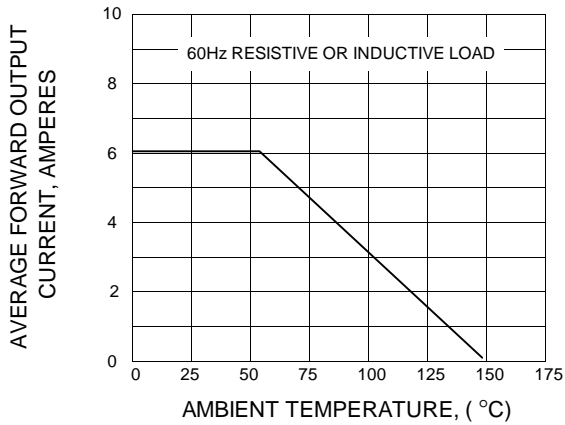
- ( 1 ) Reverse Recovery Test Conditions : I<sub>F</sub> = 0.5 A, I<sub>R</sub> = 1.0 A, I<sub>rr</sub> = 0.25 A.
- ( 2 ) Measured at 1.0 MHz and applied reverse voltage of 4.0 V<sub>DC</sub>

## RATING AND CHARACTERISTIC CURVES ( SF61 - SF69 )

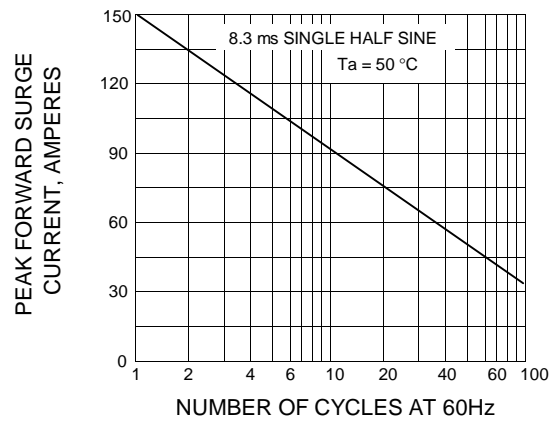
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



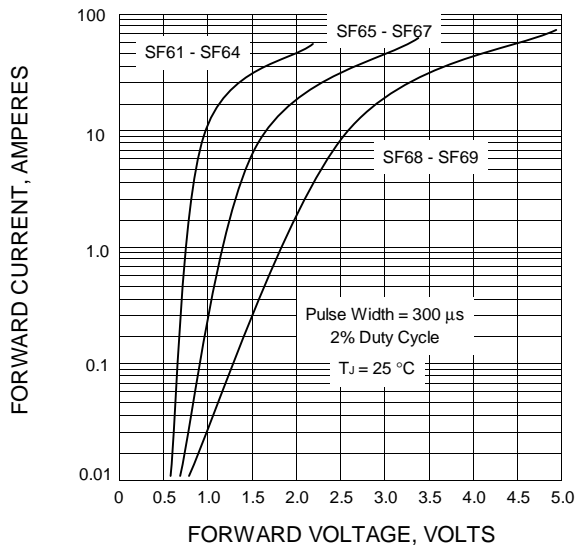
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

