



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**SF21
THRU
SF28**

TECHNICAL SPECIFICATIONS OF SUPER FAST RECTIFIER

VOLTAGE RANGE - 50 to 600 Volts

CURRENT - 2.0 Amperes

FEATURES

- * High reliability
- * Low leakage
- * Low forward voltage
- * High current capability
- * Super fast switching speed
- * High surge capability
- * Good for switching mode circuit

MECHANICAL DATA

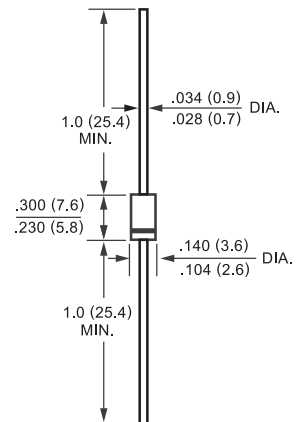
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Mounting position: Any
- * Weight: 0.38 gram

MAXIMUM RATINGS AND 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%.



DO-15



Dimensions in inches and (millimeters)

		SYMBOL	SF21	SF22	SF23	SF24	SF25	SF26	SF28	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	150	200	300	400	600	Volts
Maximum RMS Volts		VRMS	35	70	105	140	210	280	420	Volts
Maximum DC Blocking Voltage		VDC	50	100	150	200	300	400	600	Volts
Maximum Average Forward Current TA = 55°C		IO	2.0							Amps
Peak Forward Surge Current IFM (surge):8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	75							Amps
Maximum Forward Voltage at 2.0A DC		VF	0.95				1.25		1.7	Volts
Maximum DC Reverse Current	@ TA = 25°C	IR	5.0							uAmps
at Rated DC Blocking Voltage	@ TA =150°C		200							
Maximum Reverse Recovery Time (Note 1)		trr	35							nSec
Typical Junction Capacitance (Note 2)		CJ	30				20			pF
Operating and Storage Temperature Range		TJ, TSTG	-65 to + 150							°C

NOTES : 1. Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (SF21 THRU SF28)

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

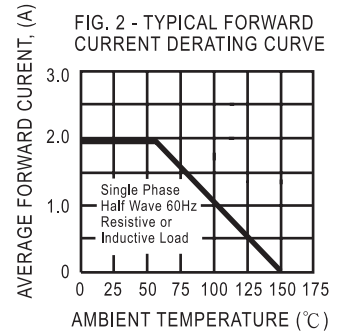
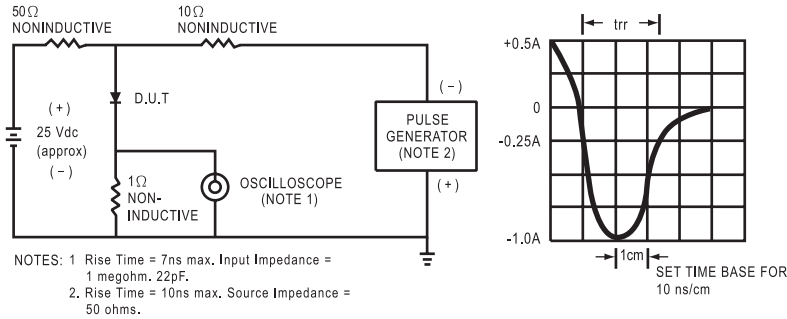


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

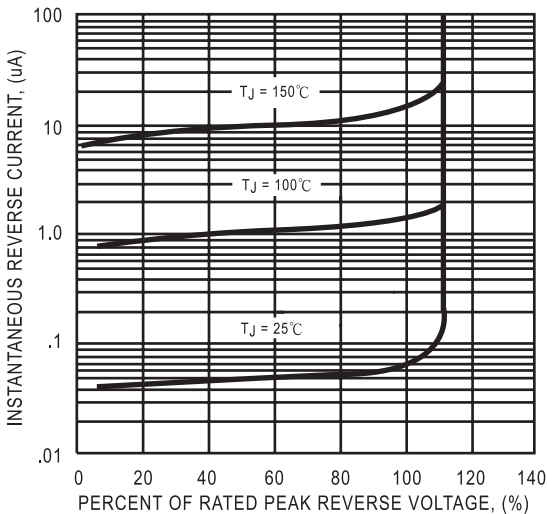


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

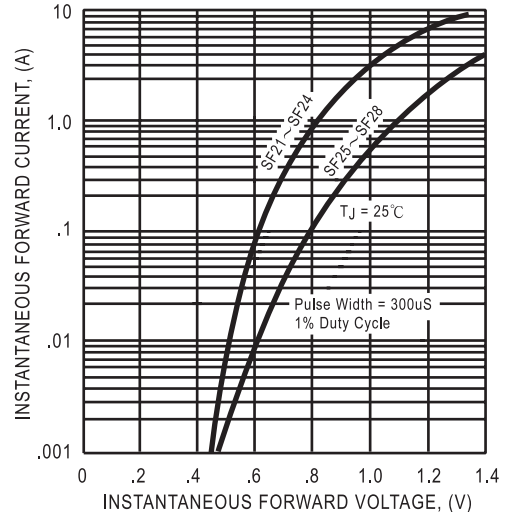


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

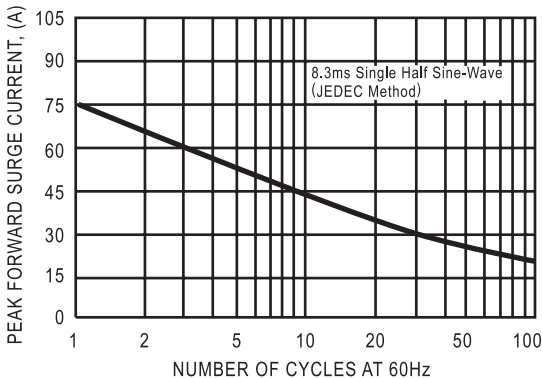
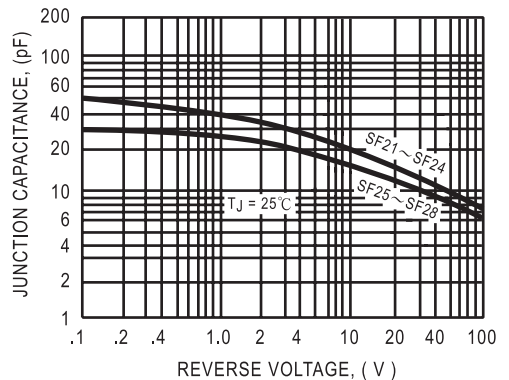


FIG. 6 - TYPICAL JUNCTION CAPACITANCE



DC COMPONENTS CO., LTD.