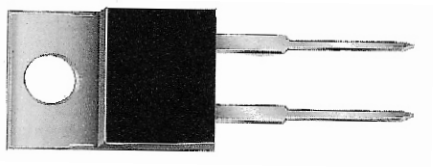
SSF81 thru SSF84

SUPER FAST RECOVERY RECTIFIER

CHENG-YI
ELECTRONIC



VOLTAGE RANGE 50 TO 200 Volts
CURRENT 8.0 Amperes

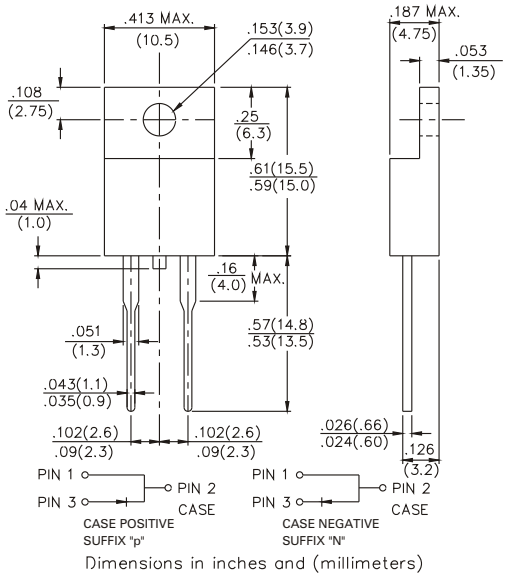
FEATURE

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

MECHANICAL DATA

- Case:TO-220A molded plastic
- Epoxy:UL 94V-0 rate reatardant
- Lead:MIL-STD-202 method 208 quaranteed
- Mounting position:any

TO-220AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Signle phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

		SSF81	SSF82	SSF83	SSF84	UNITS
Maximum Recurrent Peak Reverse Voltage		50	100	150	200	V
Maximum RMS Voltage		35	70	105	140	V
Maximum DC Blocking Voltage		50	100	150	200	V
Maximum Average Forward Rectified Current, at T_C=100°C		8.0				A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		125				A
Maximum Instantaneous Forward Voltage at 8.0A DC		0.975				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_C=25°C	10				μA
	@T_C=100°C	150				μA
Maximum Reverse Recovery Time (Note 1)		35				nS
Typical Junction Capacitance (Note 2)		65				pF
Operating and Storage Temperature Range		-65 to +150				°C

Notes : 1. Test Conditions : I_F=0.5A, I_R=1.0A, Irr=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0 Volts

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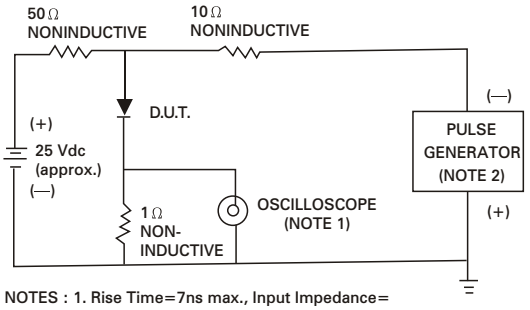
RATING AND CHARACTERISTICS CURVES
SSF81 THRU SSF84

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



NOTES : 1. Rise Time=7ns max., Input Impedance= 1 megohm, 22pF.
2. Rise Time=10ns max., Source Impedance= 50 ohms.

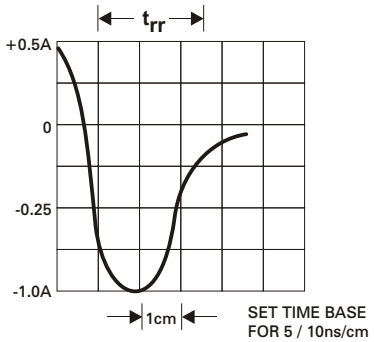


Fig. 2 - FORWARD CURRENT DERATING CURVE

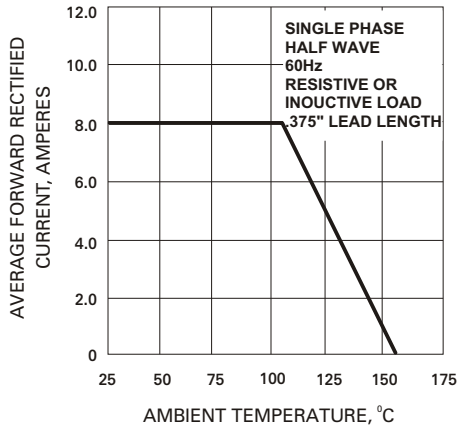


Fig. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

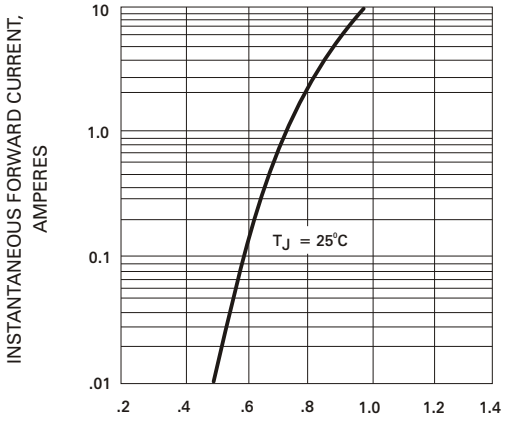


Fig. 4 - TYPICAL JUNCTION CAPACITANCE

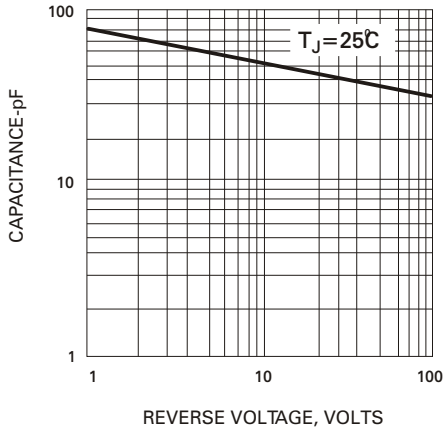


Fig. 5 - PEAK FORWARD SURGE CURRENT