SF8X SERIES

GLASS PASSIVATED SUPER FAST RECTIFIER

产品规格确认书

SF81 THRU SF88

GLASS PASSIVATED SUPER FAST RECTIFIER

康 比 電 子
HORNBY ELECTRONIC

REVERSE VOLTAGE: **50 to 600 VOLTS**

FORWARD CURRENT: **8.0 AMPERE**

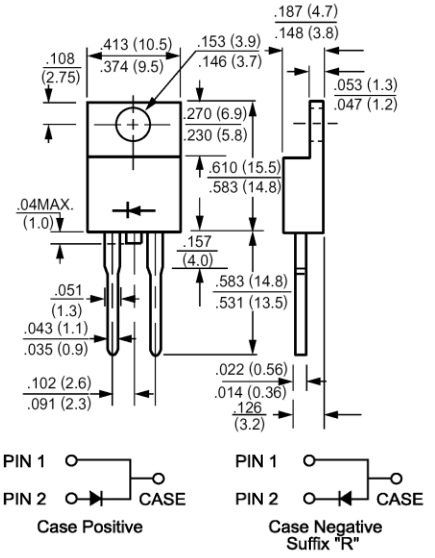
FEATURES

· Plastic package has Underwriters Laboratory Flammability Classification 94V-O ctilizing Flame Retardant Epoxy Molding Compound.
· Superfast switching time for high efficiency
· Low forward voltage drop and high current capability
· High surge capacity.
· Low reverse leakage current

MECHANICAL DATA

Case: Molded plastic, TO-220A
Epoxy: UL 94V-O rate flame retardant
Terminals: Leads solderable per MIL-STD-202 method 208 guaranteed
Polarity: As marked
Mounting position: Any
Weight: 0.08ounce, 2.24gram

TO-220A



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60H_Z, resistive or inductive load.
For capacitive load, derate current by 20%.

	Symbols	*SF81*	*SF82*	*SF83*	*SF84*	*SF85*	*SF86*	*SF87*	*SF88*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	500	600	**Volts**
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	350	420	**Volts**
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	500	600	**Volts**
Maximum Average Forward Rectified Current at T_C=100℃	$I_{(AV)}$	8.0								**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	125								**Amp**
Maximum Forward Voltage at 8.0A and T_A=25℃	V_F	0.95				1.3		1.7		**Volts**
Maximum Reverse Current at T_A=25℃	I_R	10.0								**uAmp**
at Rated DC Blocking Voltage T_A=125℃		500								
Typical Junction Capacitance (Note 1)	C_J	80				60				**pF**
Maximum Reverse Recovery Time (Note 2)	T_{RR}	35				50				**nS**
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	2.2								**℃/W**
Operating and Storage Temperature Range	T_J，Tstg	-55 to +150								**℃**

NOTES:

1- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.
2- Reverse Recovery Test Conditions：I_F=.5A，I_R=1A，I_{RR}=.25A.
3- Thermal Resistance from Junction to Case Mounted on Heatsink.

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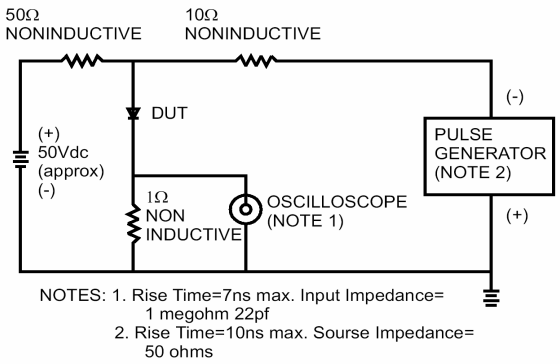
RATINGS AND CHARACTERISTIC CURVES

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



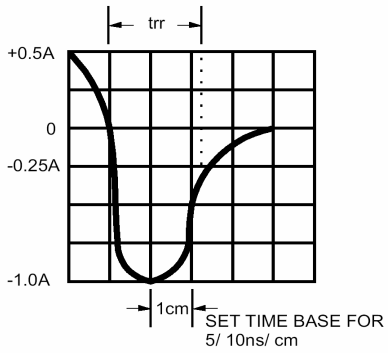


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

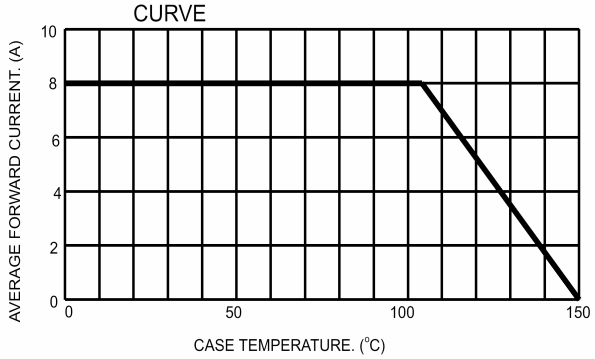


FIG.3- TYPICAL REVERSE CHARACTERISTICS

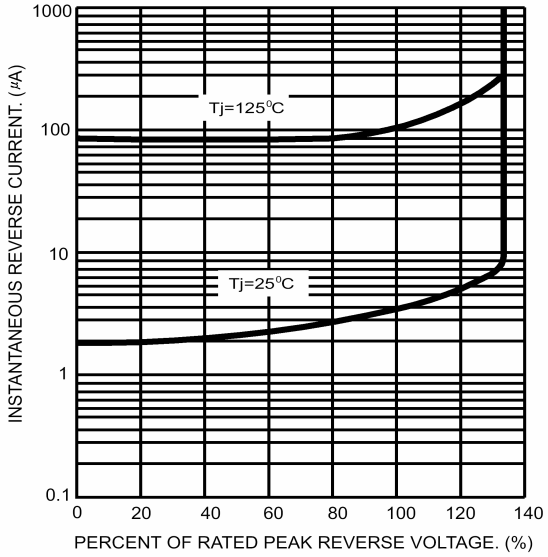


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

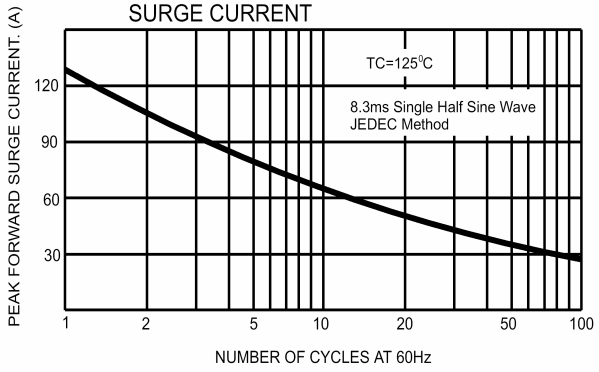


FIG.5- TYPICAL JUNCTION CAPACITANCE

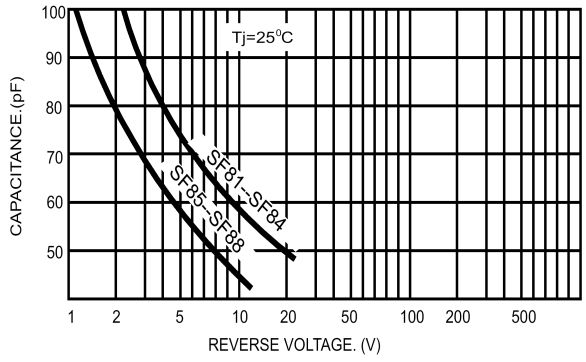


FIG.6- TYPICAL FORWARD CHARACTERISTICS