



SF101CT~SF106CT

SUPERFAST RECOVERY RECTIFIERS

Voltage Range 50 to 400 Volts

Current 10 Amperes

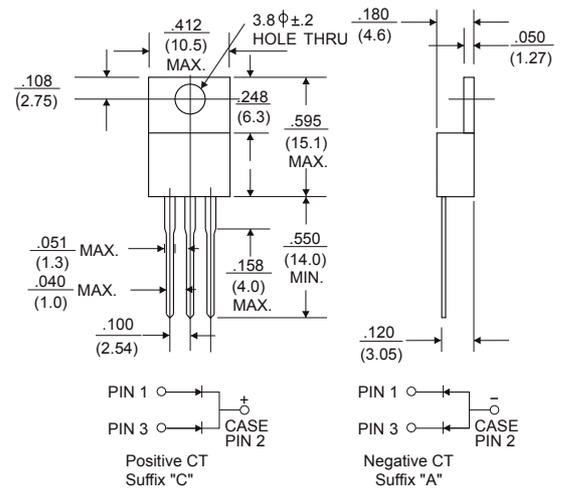
Features

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- * Exceeds environmental standards of MIL-S-19500/228
- * Low power loss, high efficiency.
- * Low forward voltage, high current capability
- * High surge capacity.
- * Super fast recovery times, high voltage.
- * Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

Mechanical Data

Case: TO-220AB Molded plastic
 Terminals: Lead solderable per MIL-STD-202G, Method 208
 Polarity: As marked.
 Standard packaging: Any
 Weight: 0.08 ounces, 2.24grams.

TO-220AB



Dimensions in millimeters

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%

PARAMETER	SYMBOL	SF101CT	SF102CT	SF103CT	SF104CT	SF105CT	SF106CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	V
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	V
Maximum Average Forward Current .375"(9.5mm) lead length at T _c =100°C	I _{AV}	10.0						A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	150						A
Maximum Forward Voltage at 5A, per element	V _F	0.95				1.30		V
Maximum DC Reverse Current at TA=25°C Rated DC Blocking Voltage TA=100°C	I _R	10				500		uA
Maximum Reverse Recovery Time (Note 2)	T _{RR}	35				50		ns
Typical Junction capacitance (Note 1)	C _J	62						pF
Maximum Thermal Resistance	R _{θJC}	3.0						°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-50 TO +150						°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, I_{rr}=.25A.
3. Both Bonding and Chip structure are available.

[Http://www.upm.com.tw](http://www.upm.com.tw)

E-mail: upm.tw@msa.hinet.net



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Rating and Characteristic Curves

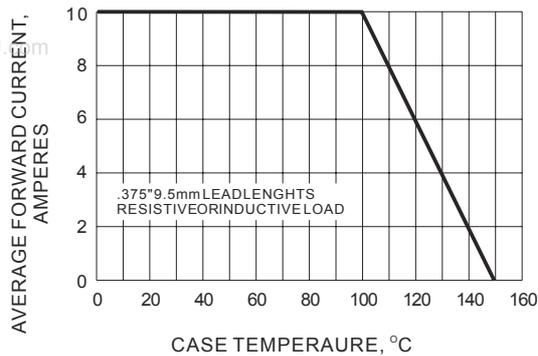


Fig.1- FORWARD CURRENT DERATING CURVE

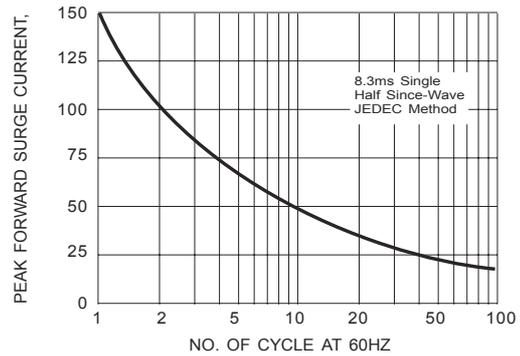


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

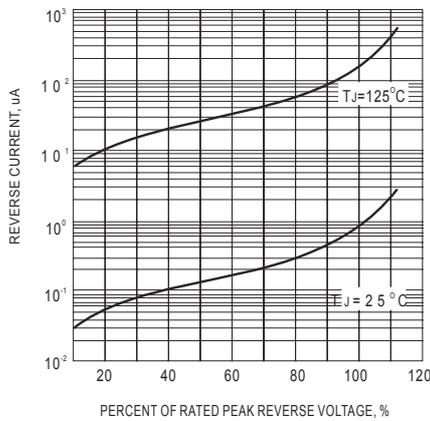


Fig.3- TYPICAL REVERSE CHARACTERISTIC

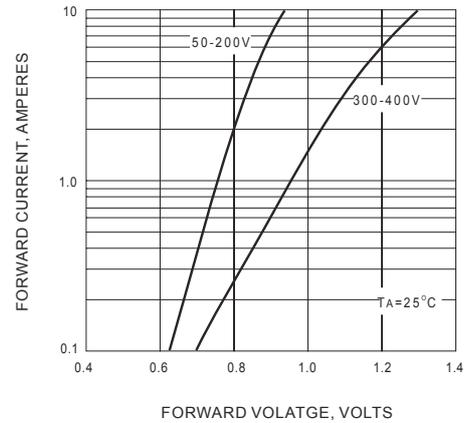


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC