

SUPER FAST RECTIFIERS

REVERSE VOLTAGE - 50 to 600Volts
FORWARD CURRENT - 30.0 Amperes

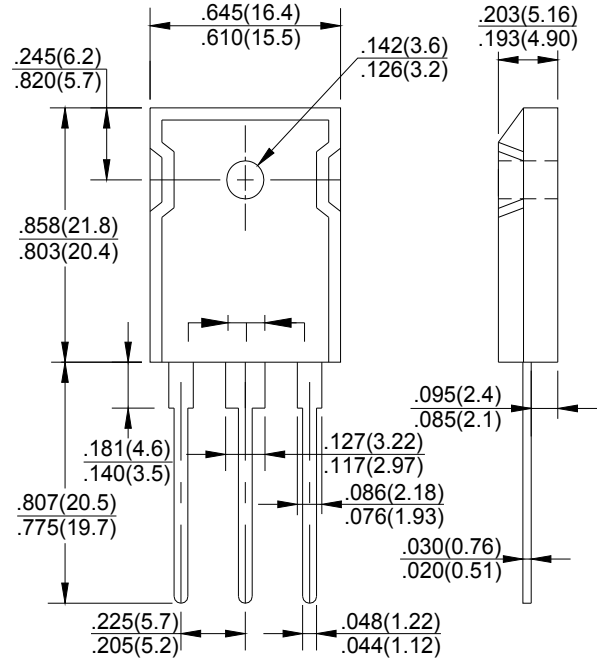
FEATURES

- Super fast switching time for high efficiency
- Low forward voltage drop
High current capability
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case: TO-3P molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Mounting position :Any
- Weight: 5.1grams
- polarity: As marked

TO-3P



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SF 3001PT	SF 3002PT	SF 3003PT	SF 3004PT	SF 3005PT	SF 3006PT	SF 3008PT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	600	V
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current @TA =75 ℃	Io	30							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	IFSM	300							A
Peak Forward Voltage at 15.0A DC	VF	1.0			1.3			1.7	V
Maximum DC Reverse Current @TJ=25℃ at Rated DC Blocking Voltage @TJ=100℃	IR	10 200							μA
Maximum Reverse Recovery Time(Note1)	TRR	35							nS
Typical Junction Capacitance (Note2)	CJ	175							pF
Typical Thermal Resistance	RθJA	2.0							℃/W
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150							℃

NOTES:1.Measured with I_F=0.5A,I_R=1A,I_{RR}=0.25A

2.Measured at 1.0 MHZ and applied reverse voltage of 4.0VDC.

3.The typical data above is for reference only(典型值仅供参考).

RATING AND CHARACTERISTIC CURVES

SF3001PT thru SF3008PT



FIG.1- TYPICAL FORWARD CURRENT DERATING CURVE

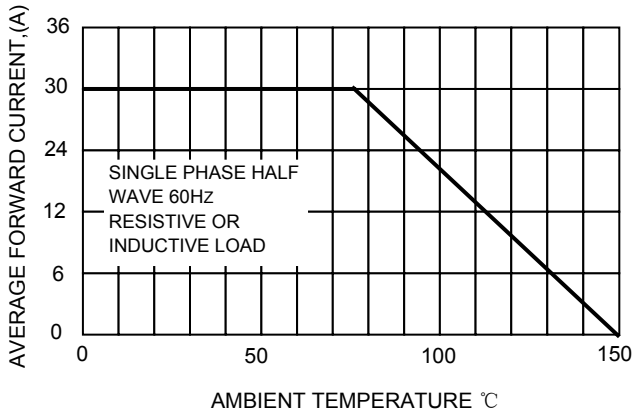


FIG.2-TYPICAL REVERSE CHARACTERISTICS

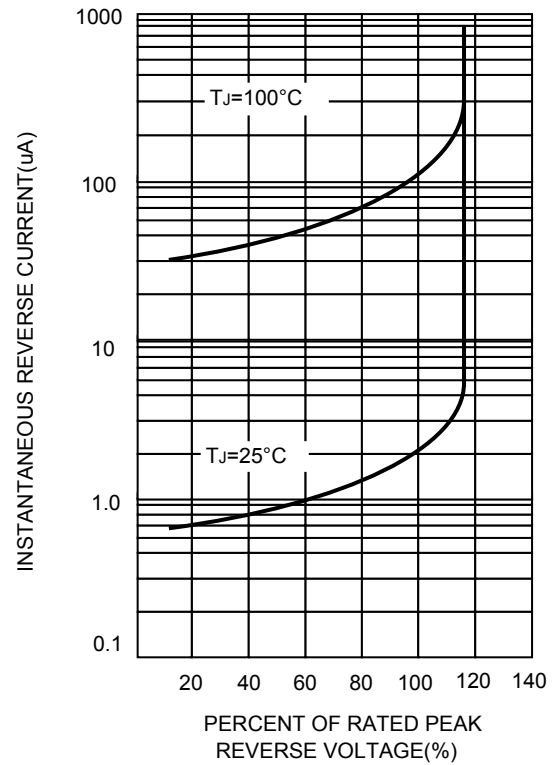


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

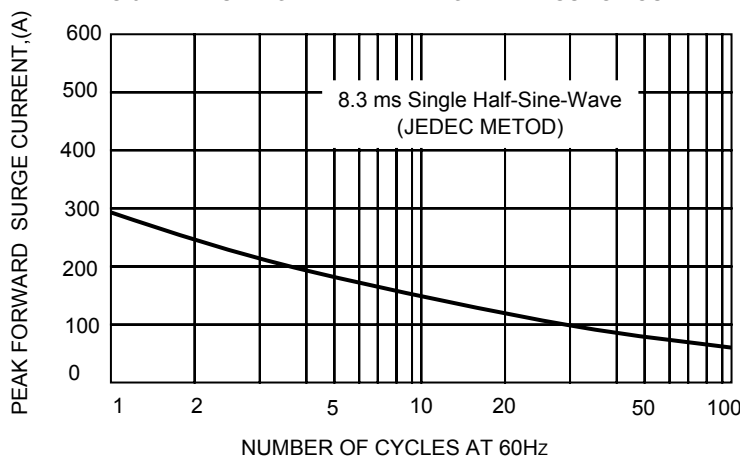


FIG.5-TYPICAL JUNCTION CAPACITANCE

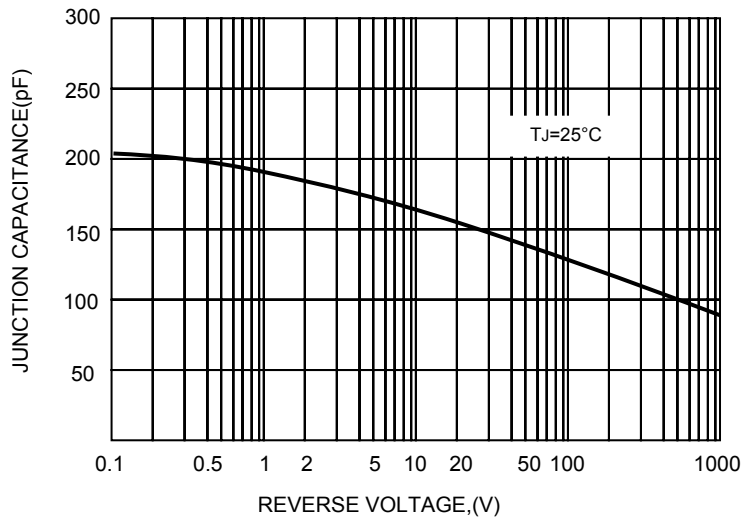
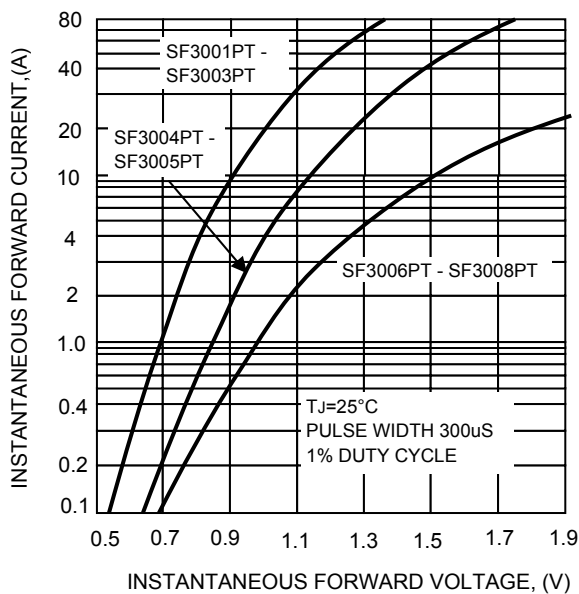


FIG.4-TYPICAL INSTANTAEIOUS FORWARD CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!



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