

SF51 THRU SF57

SUPER FAST RECOVERY SILICON RECTIFIERS

FEATURES:

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Good for switching mode application
- Open junction

MECHANICAL DATA

Case : Molded plastic

Epoxy: UL 94V-0 rate flame retardant

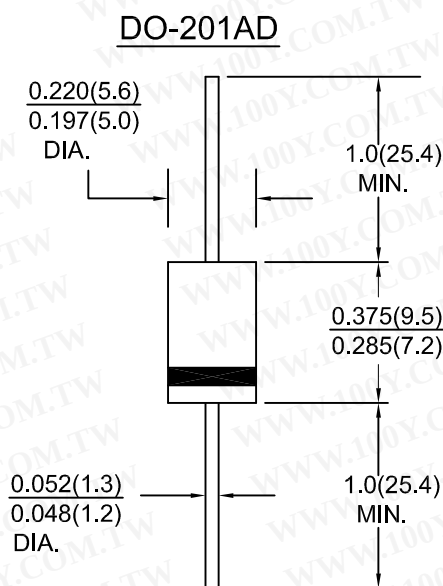
Lead : Axial leads, solderable per MIL-STD-202,
Method 208 guaranteed

Polarity : Color band denotes cathode end

Mounting Position : Any

Weight : 1.10 grams

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temp. unless otherwise specified.

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

For capacitive load, derate current by 20 %.

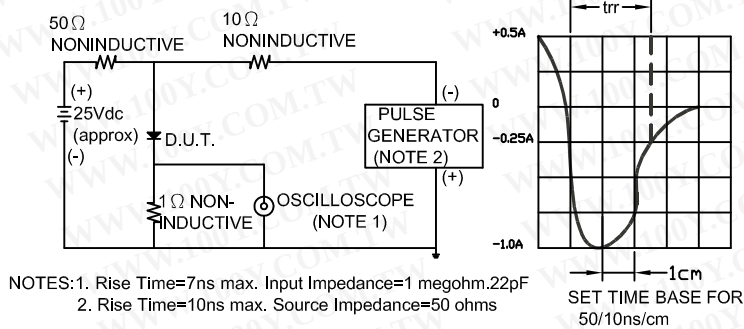
Characteristic	Symbol	SF 51	SF 52	SF 53	SF 54	SF 55	SF 56	SF 57	Units
Maximum recurrent peak reverse voltage	VRRM	50	100	150	200	300	400	600	Volts
Maximum RMS voltage	VRMS	35	70	105	140	210	280	420	Volts
Maximum DC blocking voltage	VDC	50	100	150	200	300	400	600	Volts
Maximum average forward rectified current .375"(9.5mm) lead length at Ta=55 °C	I(AV)	5.0							Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I(FSM)	150							Amps
Maximum instantaneous forward voltage at 5.0 A	V(F)	1.00				1.30		1.70	Volts
Maximum DC reverse current at rated DC blocking voltage Ta=25°C Ta=100°C	I(R)	5.0 100							μ A
Maximum reverse recovery time (note 1)	t(rr)	35							nS
Typical junction capacitance (note 2)	C(j)	50							pF
Operating and storage temperature range	T(j),T(stg)	-65 to +150							°C

Notes : 1. Reverse recovery test condition : IF=0.5A ; IR=1.0A ; IRR=0.25A

2. Measured 1MHz and applied reverse voltage of 4.0V DC

RATINGS AND CHARACTERISTIC CURVES SF51 THRU SF57

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



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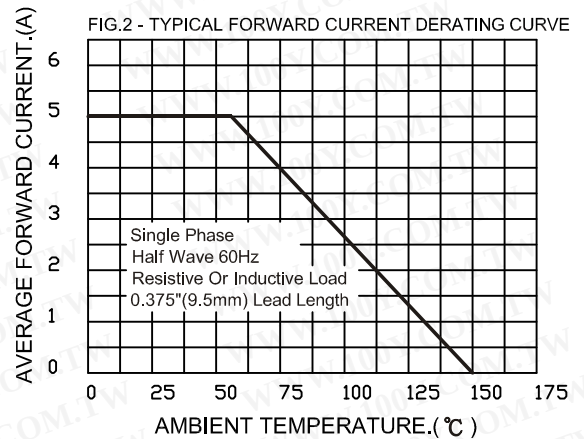


FIG.3-TYPICAL FORWARD CHARACTERISTICS

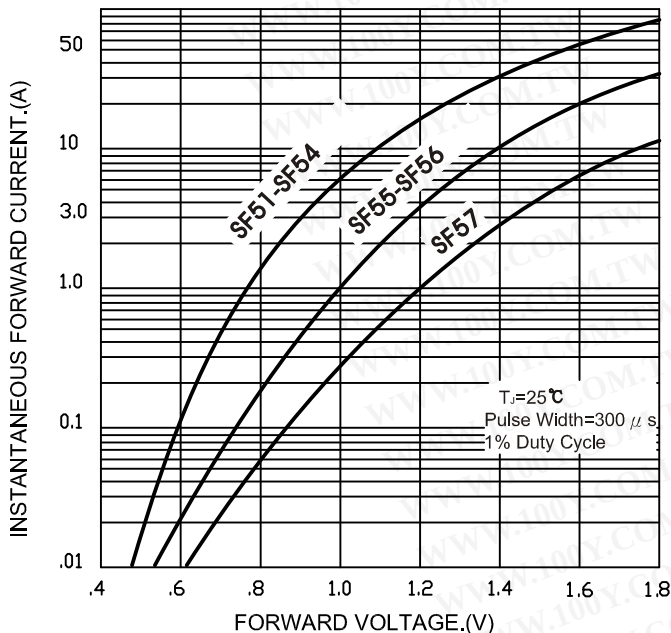


FIG.4-TYPICAL REVERSE CHARACTERISTICS

