

SF21 THRU SF27

SUPER FAST RECOVERY SILICON RECTIFIERS

FEATURES:

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

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)

MECHANICAL DATA

Case : Molded plastic

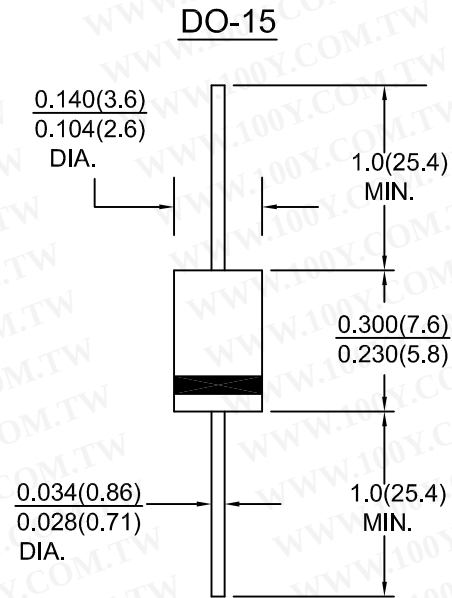
Epoxy: UL 94V-0 rate flame retardant

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

Polarity : Color band on body denotes cathode end

Mounting Position : Any

Weight : 0.40 grams



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 %.

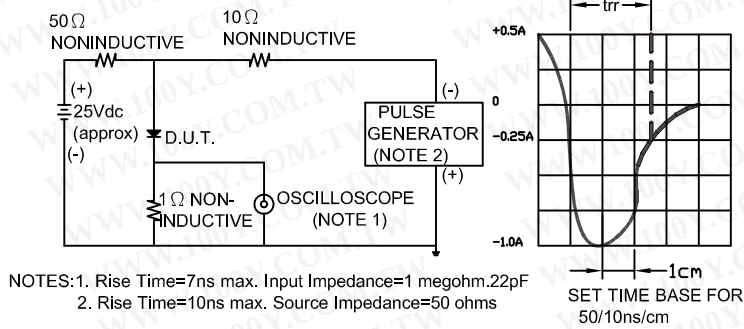
Characteristic	Symbol	SF 21	SF 22	SF 23	SF 24	SF 25	SF 26	SF 27	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	150	200	300	400	600	Volts
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	420	Volts
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	600	Volts
Maximum average forward rectified current .375"(9.5mm) lead length at Ta=55°C	I _(AV)	2.0							Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	50							Amps
Maximum instantaneous forward voltage at 2.0 A	V _F	0.95				1.25		1.70	Volts
Maximum DC reverse current Ta=25°C at rated DC blocking voltage 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	60							pF
Operating and storage temperature range	T _j , T _{stg}	-65 to +150							° C

Notes : 1. Reverse recovery test condition : I_F=0.5A ; I_R=1.0A ; I_{RR}=0.25A

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

RATINGS AND CHARACTERISTIC CURVES SF21 THRU SF27

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



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FIG.2 - TYPICAL FORWARD CURRENT DERATING CURVE

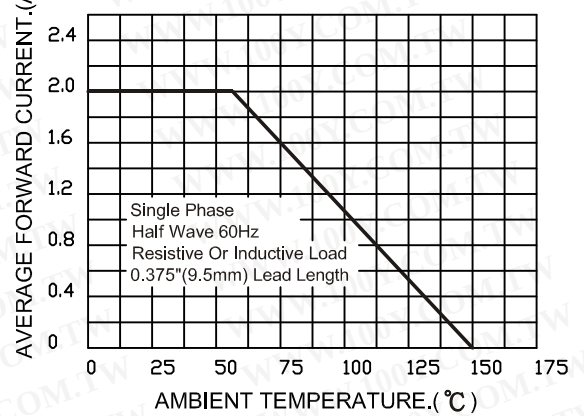


FIG.3-TYPICAL FORWARD CHARACTERISTICS

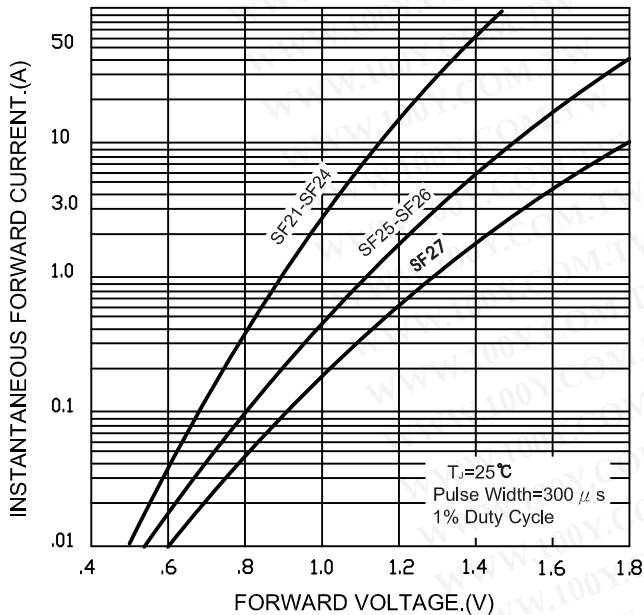


FIG.4-TYPICAL REVERSE CHARACTERISTICS

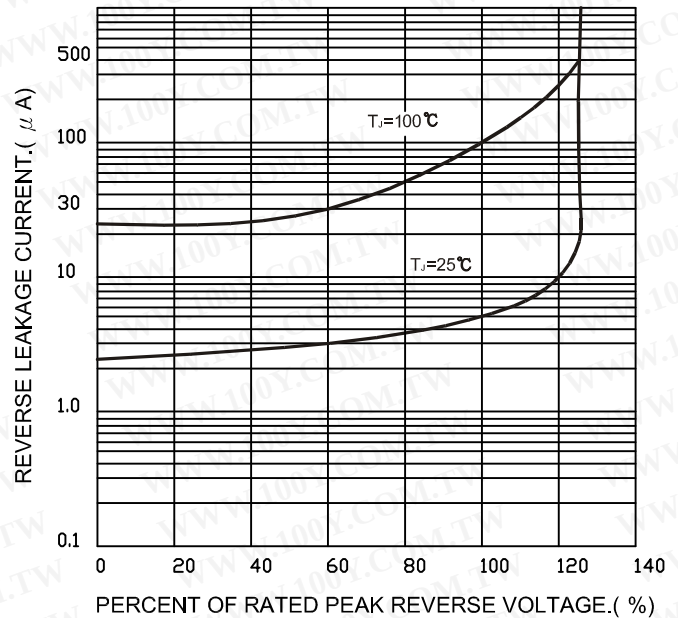


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

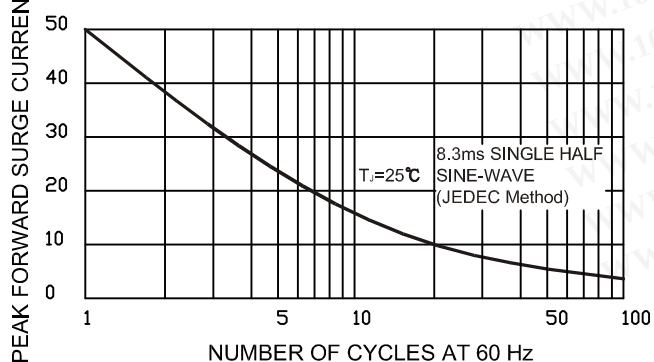


FIG.6-TYPICAL JUNCTION CAPACITANCE

