

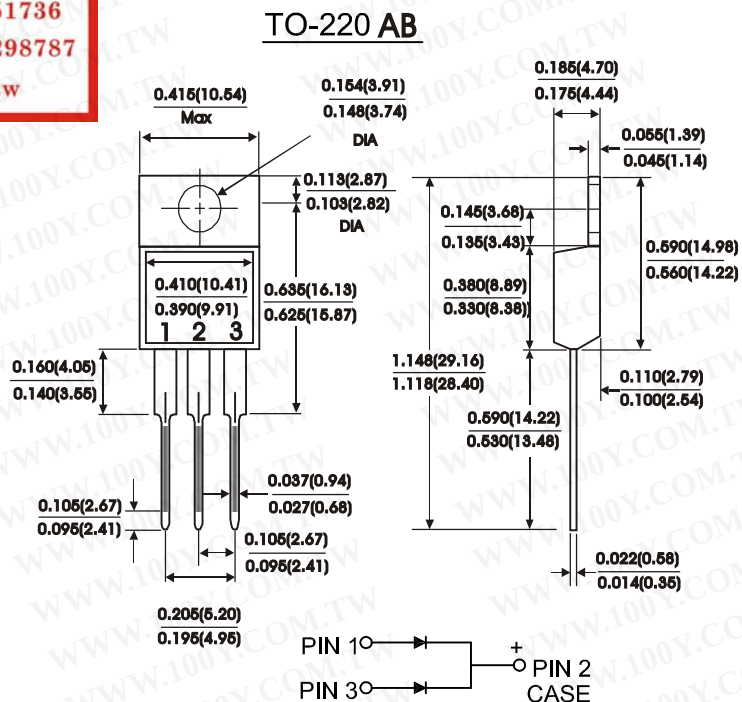
勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ideally suited for freewheeling diode power factor correction applications
- Excellent high temperature switching
- Optimized to reduce switching losses
- High temperature soldering guaranteed : 250°C /10 second,0.25"(6.35mm)from case

MECHANICAL DATA

Case : JEDEC TO-220AB molded plastic
 Terminals : Leads solderable per MIL-STD-750 Method 2026
 Position : As marked
 Mounting Position : Any
 Mounting Torque : 5 in - lbs.max
 Weight : 0.08 ounce,2.24grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

Characteristic	Symbol	SFF 5005CT	SFF 501CT	SFF 502CT	SFF 503CT	SFF 504CT	SFF 506CT	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	300	400	600	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	210	280	420	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	300	400	600	Volts
Maximum average forward rectified current at T _c =132°C	I _(AV)	5.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	I _{FSM}	45						Amps
Maximum instantaneous forward voltage (Per leg) IF=2.5A	V _F	0.98			1.30		1.70	Volts
Maximum DC reverse current at rated DC blocking voltage (Per leg) T _c =25 °C T _c =125 °C	I _R	10.0 500.0						μA
Typical reverse recovery time (NOTE 1)(Per leg)	T _{RR}	35						nS
Typical junction capacition (NOTE 2)(Per leg)	C _J	50						P _F
Operating temperature range	T _J	-55to+150						°C
Storage temperature range	T _{Stg}	-55to+150						°C

NOTES:

(1)Reverse Recovery Test CONDITION : $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$

(2)Measured at 1 MHz and reverse Voltage of 4.0V

(3)Marking : SF5005CT = SF5005 (Without Marking "CT")
 Symbol Marking

RATINGS AND CHARACTERISTIC CURVES SF5005CT THRU SF506CT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

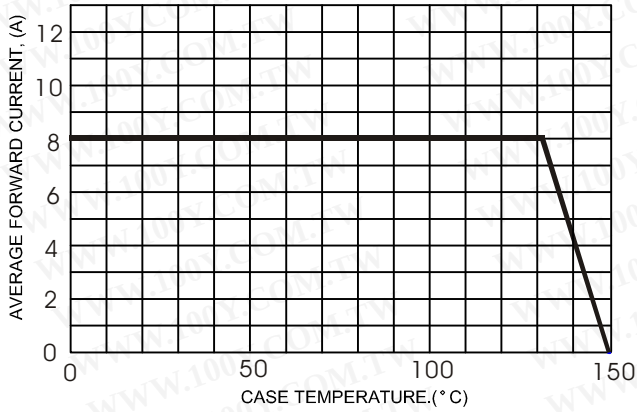


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

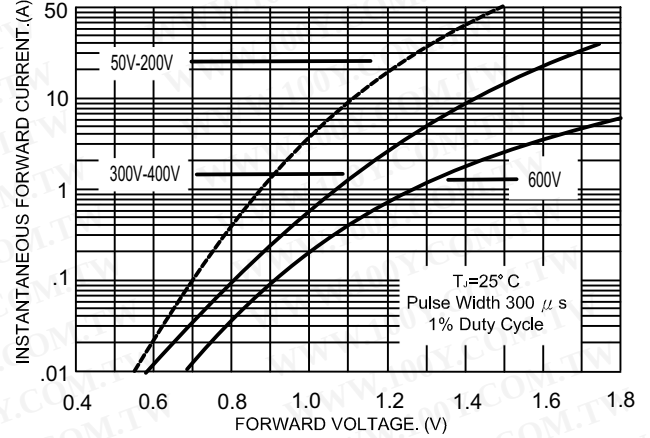


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

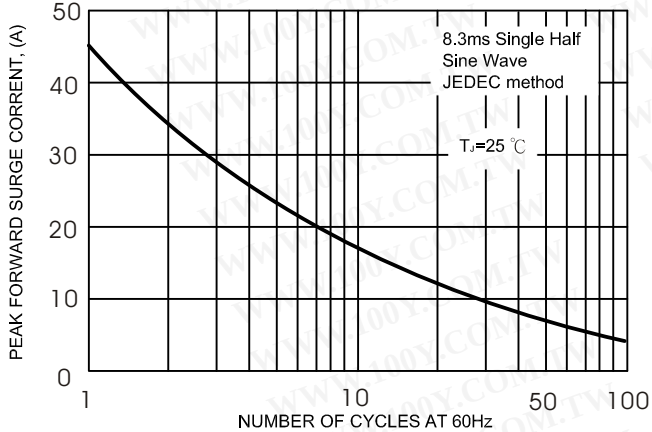


Figure 6 GR1 Test Circuit

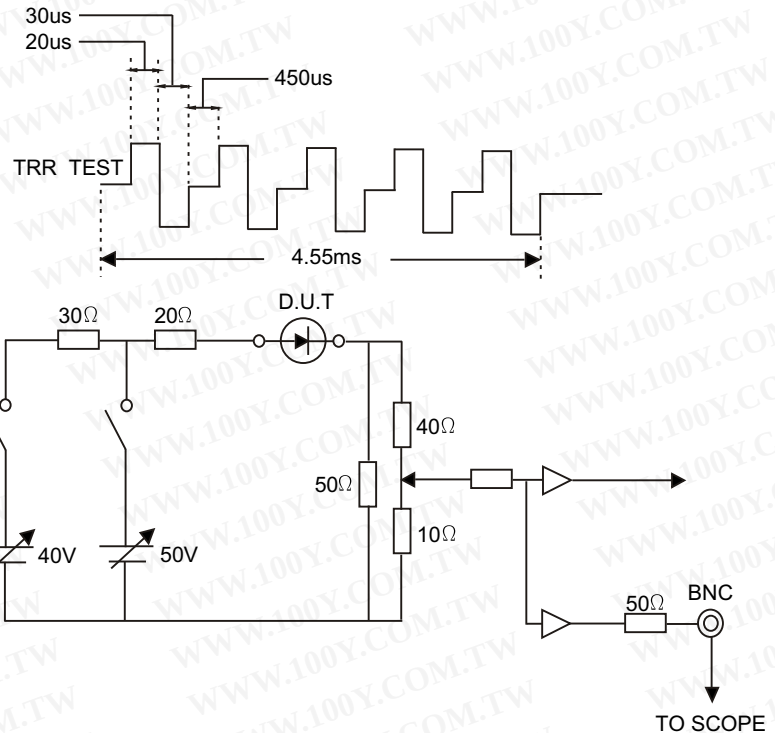


FIG.4- TYPICAL JUNCTION CAPACITANCE

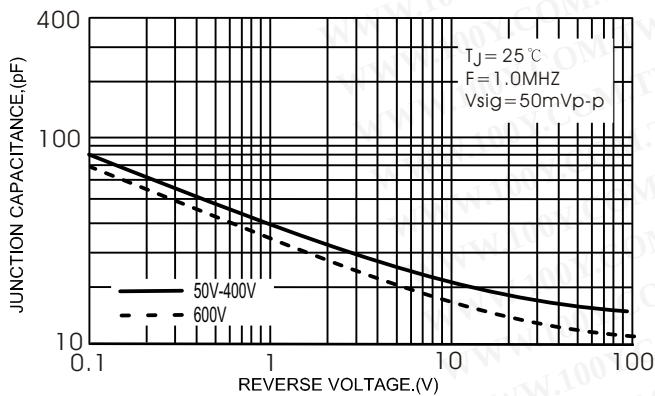
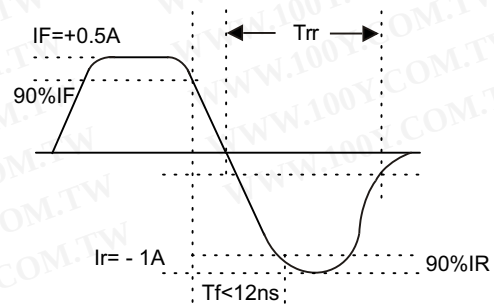
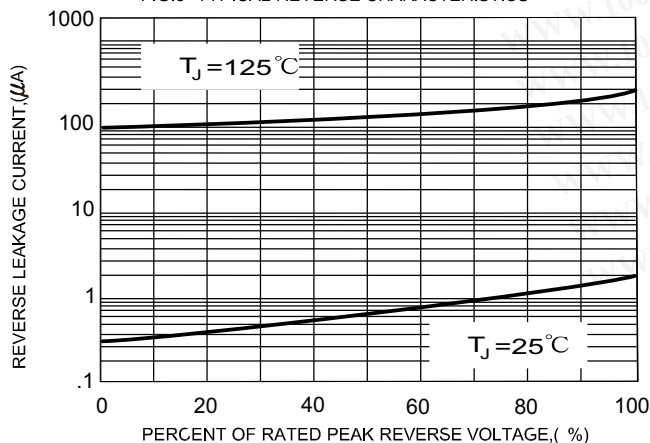


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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)