

FR151 THRU FR157

FAST RECOVERY SILICON RECTIFIERS

FEATURES:

- Low cost
- High surge current capability
- Low leakage current
- Low forward voltage drop
- Diffused junction

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 use UL 94V-0 recognized flame retardant epoxy

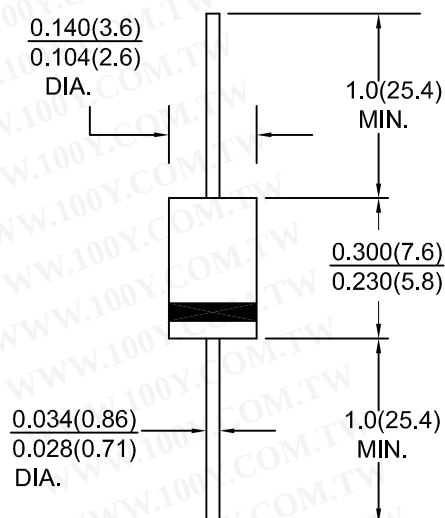
Terminals : Axial leads, solderable per MIL-STD-202F, Method 208

Polarity : Color band on body denotes cathode

Mounting Position : Any

Weight : 0.35 grams

DO-204AC(DO-15)



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	FR 151	FR 152	FR 153	FR 154	FR 155	FR 156	FR 157	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at Ta=55°C	I _O	1.5							Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	50.0							Amps
Maximum instantaneous forward voltage drop at 1.5 A	V _F	1.30							Volts
Maximum DC reverse current Ta=25°C Ta=55°C	I _R	5.0 30.0							μA
Typical reverse recovery time (note 1)	t _{rr}	150	150	150	150	250	500	500	nS
Typical junction capacitance (note 2)	C _j	20							pF
Operating junction and storage temperature range	T _j , T _{stg}	-65 to +125				-65 to +150			°C

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

2. Measured at 1MHz and Applied reverse voltage of 4.0V_{DC}

RATINGS AND CHARACTERISTIC CURVES FR151 THRU FR157

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

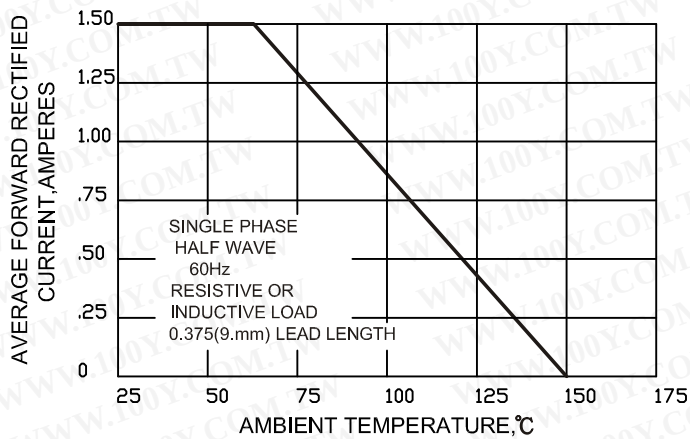


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

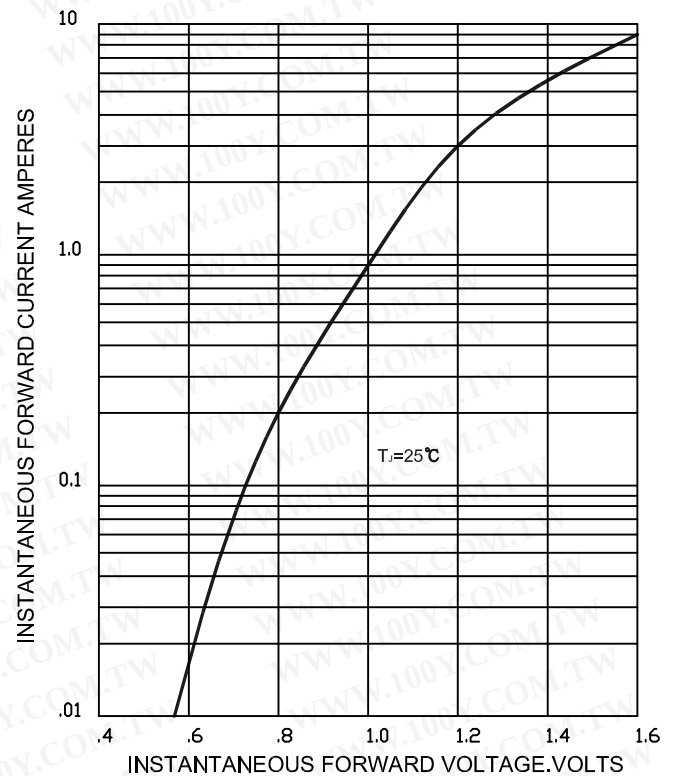


FIG.3-TYPICAL JUNCTION CAPACITANCE

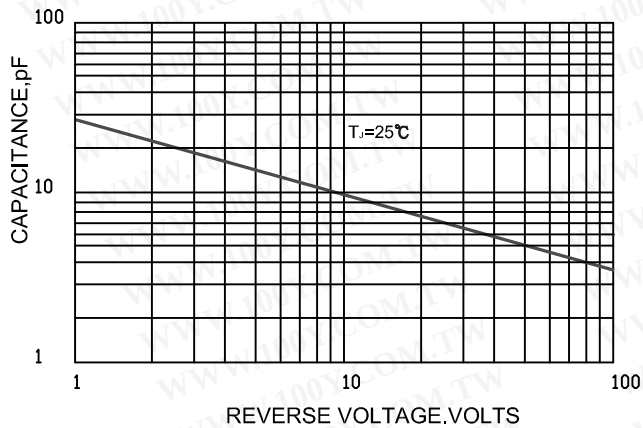


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

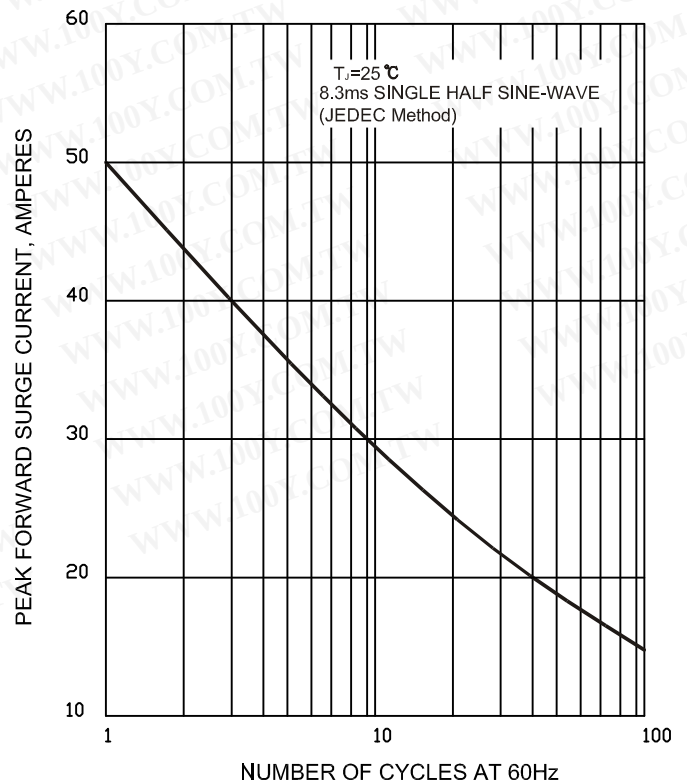


FIG.5-REVERSE RECOVERY TIME CHARACTERISTICS

