

SR520 THRU SR5A0

SCHOTTKY BARRIER RECTIFIERS

FEATURES:

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

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

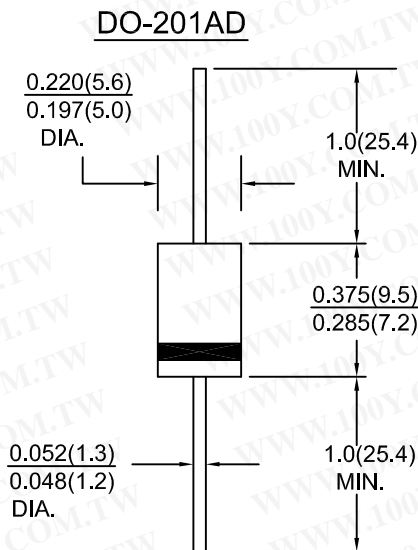
Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy

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

Polarity : Color band on body denotes cathode end

Mounting Position : Any

Weight : 1.12 grams, 0.040 ounce



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	SR52	SR53	SR54	SR55	SR56	SR58	SR5A0	Units
Maximum recurrent peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current	I _(AV)	5.0							Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	120							Amps
Maximum instantaneous forward voltage at 5.0 A(NOTE 3)	V _F	0.55		0.70		0.85			Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 3)	I _R	1.0			1.5			mA	
		50		25					
Typical thermal resistance (note 1)	R _{th-JA}	25							°C/W
Typical junction capacitance (note 2)	C _j	500			400				pF
Operating junction temperature range	T _j	-65 to +125			-65 to +150				°C
Storage temperature range	T _{stg}	-65 to +150							°C

NOTES: 1. Thermal Resistance from junction to Ambient Vertical P.C.Board mounting,0.375"(9.5mm) Lead Length

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V_{DC}

3. Pulse test : 300 us pulse width, 1% duty cycle

RATINGS AND CHARACTERISTIC CURVES SR520 THRU SR5A0

FIG.1-FORWARD CURRENT DERATING CURVE

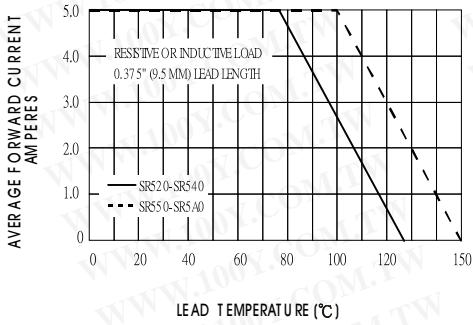


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

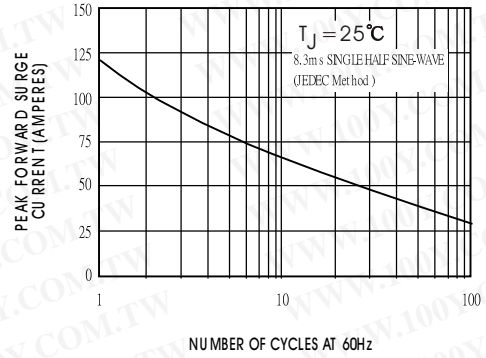


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

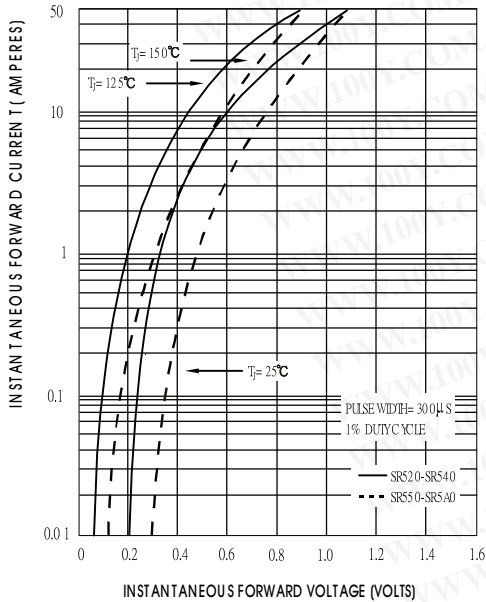


FIG.4-TYPICAL REVERSE CHARACTERISTICS

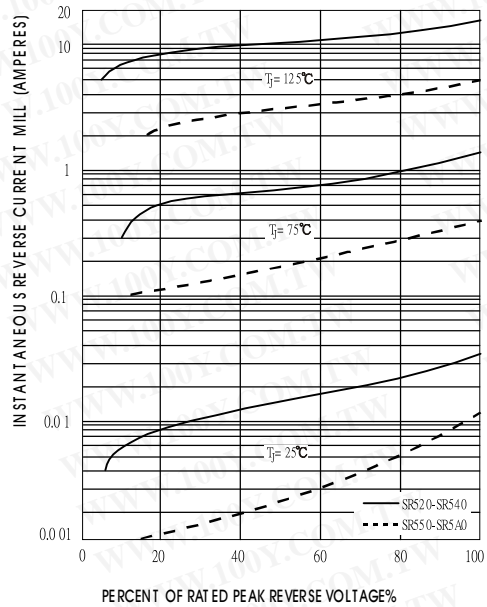


FIG.5-TYPICAL JUNCTION CAPACITANCE

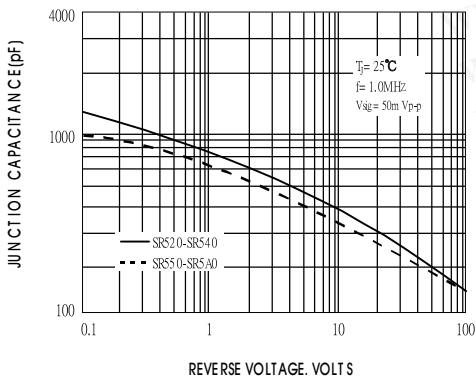
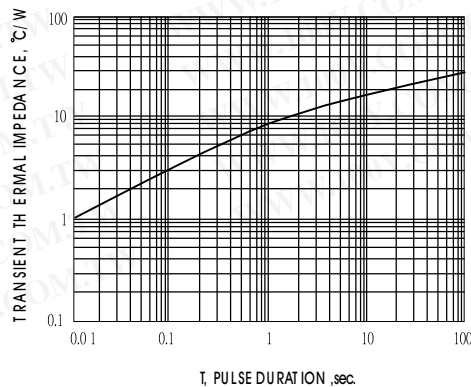


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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