HITANO ENTERPRISE CORP.

SR520 THUR SR5100

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 100 Volts CURRENT - 5.0 Amperes

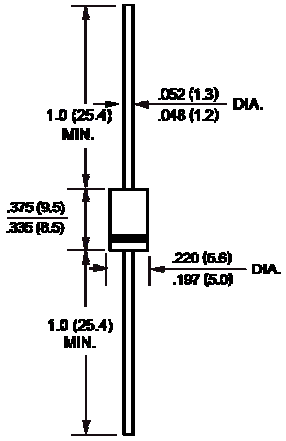
FEATURES

* High reliability
* Low switching noise
* Low forward voltage drop
* High current capability
* High switching capability

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: MIL-STD-202E, Method 208 guaranteed
* Polarity: Color band denotes cathode end
* Mounting position: Any
* Weight: 1.18 grams

DO-27



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

		SYMBOL	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	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 .375*(9.5mm) lead length		I_O	5.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	150							Amps
Maximum Instantaneous Forward Voltage at 5.0A DC		V_F	.55			.70		.85		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	2.0							mAmps
	@T_A = 100°C		50							
Typical Thermal Resistance (Note 1)		$R_{\theta JL}$	18							°C/W
Typical Junction Capacitance (Note 2)		C_J	550			400				pF
Operating Temperature Range		T_J	-65 to +150							°C
Storage Temperature Range		T_{STG}	-65 to +150							°C

NOTES : 1. Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.5*(12.7mm) Lead Length.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (SR520 THRU SR5100)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

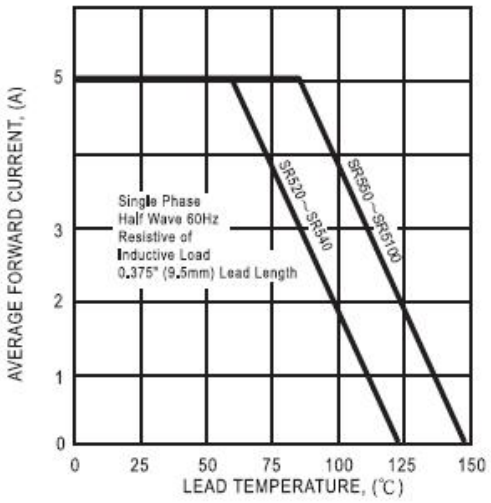


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

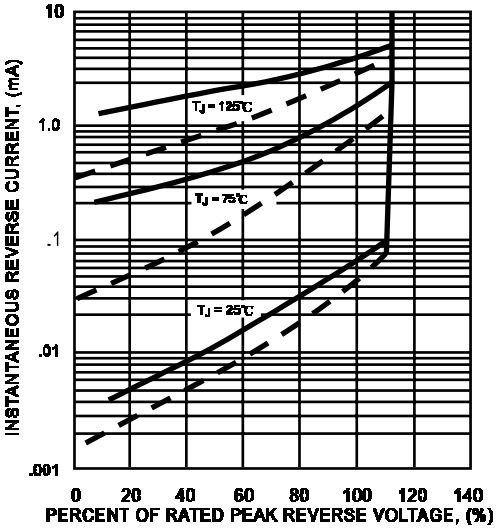


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

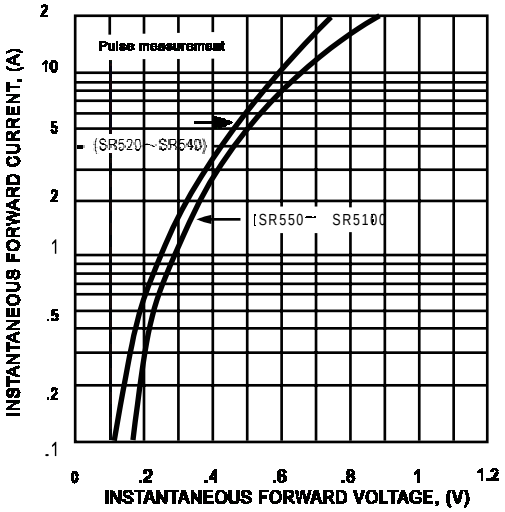


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

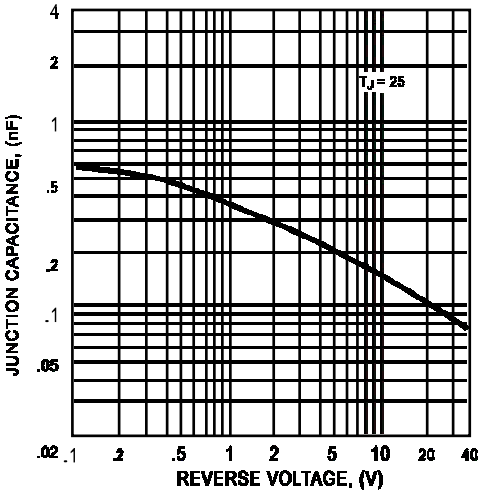


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT