

SR520 thru SR5100

MINIATURE SCHOTTKY BARRIER RECTIFIER



**CHENG-YI
ELECTRONIC**



FEATURES

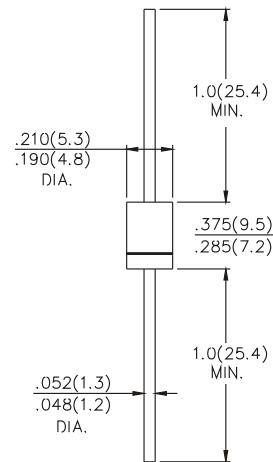
- Low switching noise
- Low forward voltage drop
- High current capability
- High switching capability
- High reliability
- High surge capability

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: MIL-STD-202 method 208 guaranteed
- Mounting position: Any

VOLTAGE RANGE
20 TO 100 Volts
CURRENT
5.0 Amperes

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load.
For capacitive load, derate current by 20%.

	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	64	80	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current, .375", 9.5mm, Lead Length See Fig.1	5.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Instantaneous Forward Voltage at 5.0A	0.55		0.70		0.85			V
Maximum DC Reverse Current at DC $T_A=25^\circ\text{C}$	0.5							mA
Blocking Voltage $T_A=100^\circ\text{C}$	50.0							mA
Maximum Thermal Resistance $R_{\theta JL}$ (Note 1)	15			10				$^\circ\text{C} / \text{W}$
Typical Junction Capacitance (Note 2)	500			380				pF
Operating Temperature Range T_J	-55 to +125							$^\circ\text{C}$
Storage Temperature Range T_{STG}	-55 to +125							$^\circ\text{C}$

Notes : 1. Thermal Resistance Junction to Lead Vertical PC Board Mounting, .375" (9.5mm) Lead Length.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

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RATING AND CHARACTERISTICS CURVES SR520 THRU SR5100

Fig.1 - TYPICAL FORWARD CHARACTERISTICS

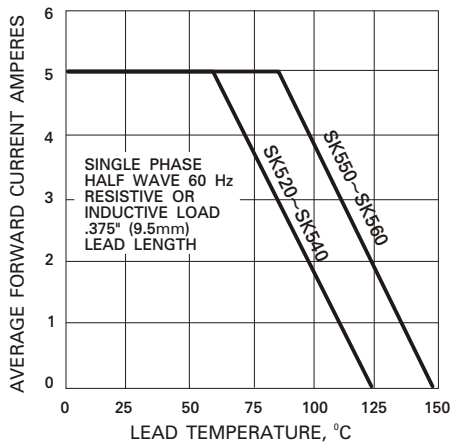


Fig.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

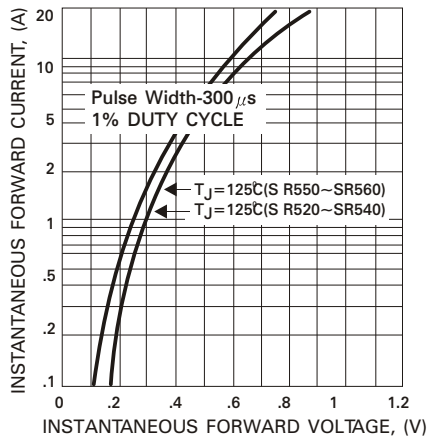


Fig.2 - TYPICAL REVERSE CHARACTERISTICS

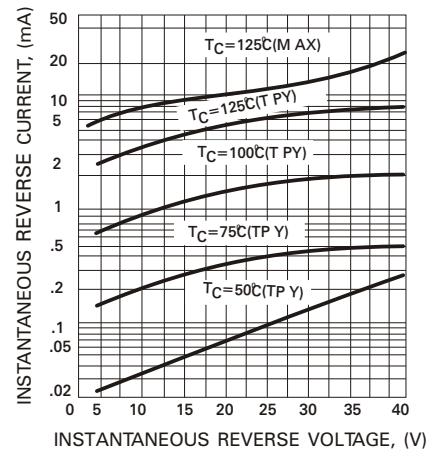


Fig.4 - TYPICAL JUNCTION CAPACITANCE

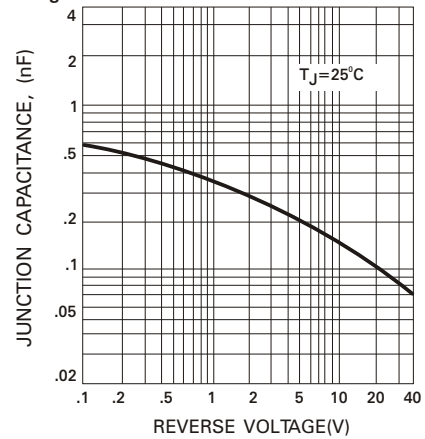


Fig.5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

