

SR520 THRU SR5100

SCHOTTKY BARRIER RECTIFIER



康 比 電 子
HORNBY ELECTRONIC

REVERSE VOLTAGE: 20 to 100 VOLTS
FORWARD CURRENT: 5.0 AMPERE

FEATURES

- High current capability
- High surge current capability
- Low forward voltage drop
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters free wheeling, and porlarlity protection applications

MECHANICAL DATA

Case: Molded plastic, DO-201AD

Epoxy: UL 94V-O rate flame retardant

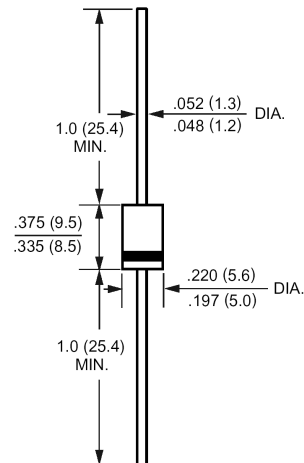
Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any

Weight: 0.04ounce, 1.1gram

DO-201AD



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols	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 _(AV)	5.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150							Amp
Maximum Forward Voltage at 5.0A DC and 25	V _F	0.55			0.70		0.85		Volts
Maximum Reverse Current at T _A =25 at Rated DC Blocking Voltage T _A =100	I _R	0.5 50							mAmp
Typical Junction Capacitance (Note 1)	C _J	500			380				pF
Typical Thermal Resistance (Note 2)	R _{θJA}	15			10				/W
Operating Junction Temperature Range	T _J	-55 to +125			-55 to +150				
Storage Temperature Range	T _{stg}	-55 to +150							

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted

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RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

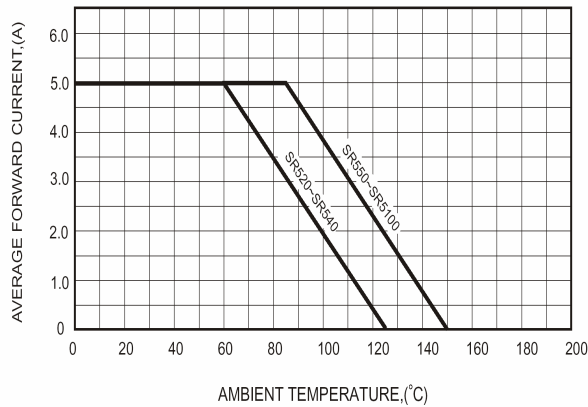


FIG.2-TYPICAL FORWARD CHARACTERISTICS

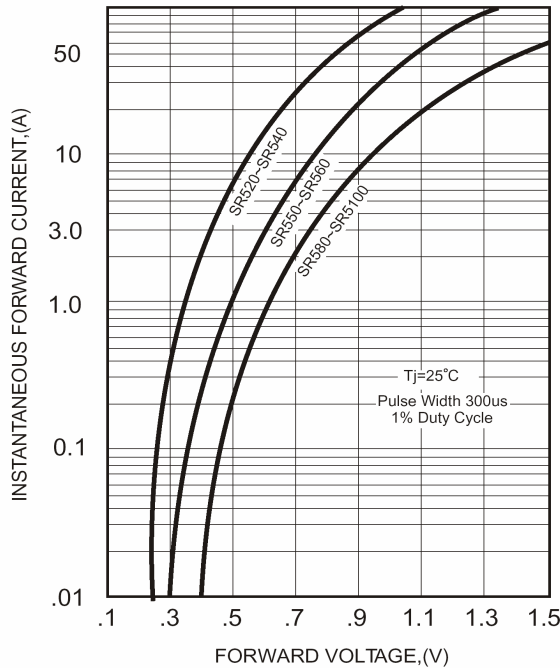


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

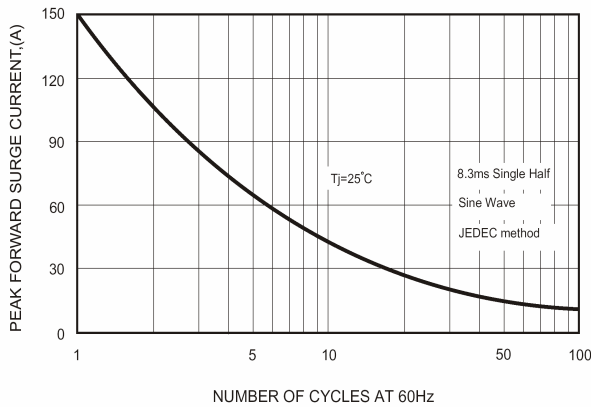


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

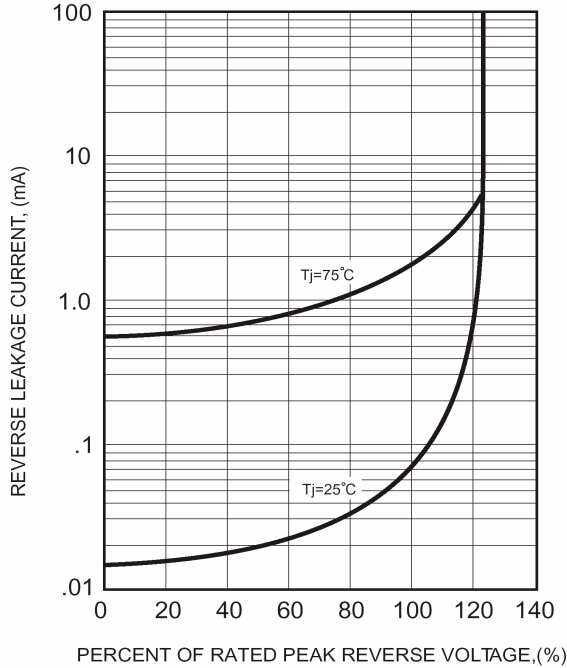


FIG.4-TYPICAL JUNCTION CAPACITANCE

