SR520 THRU SR5200

5.0 AMP SCHOTTKY BARRIER RECTIFIERS

FEATURES

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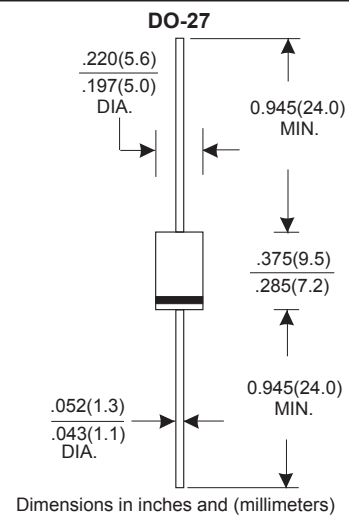* Epitaxial construction

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: Axial leads, solderable per MIL-STD-202,
         method 208 guranteed
* Polarity: Color band denotes cathode end
* Mounting position: Any
* Weight: 1.00 grams

* Both normal and Pb free product are available:

* Normal:80~95%Sn,5~20%Pb

* Pb free:99 Sn above can meet Rohs enviroment substance directive request

VOLTAGE RANGE
20 to 200 Volts
CURRENT
5.0 Amperes

DO-27

.220(5.6)
.197(5.0)
DIA.

0.945(24.0) MIN.

.375(9.5)
.285(7.2)

0.945(24.0) MIN.

.052(1.3)
.043(1.1)
DIA.

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SR520	SR540	SR560	SR580	SR5100	SR5150	SR5200	UNITS
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	150	200	V
Maximum RMS Voltage	14	32	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current 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 Ta=25°C				200				uA
at Rated DC Blocking Voltage Ta=100°C				20				mA
Typical Junction Capacitance (Note1)				380				pF
Typical Thermal Resistance RθJA (Note 2)				10				°C/W
Operating Temperature Range TJ				-65 —+150				°C
Storage Temperature Range TSTG				-65 — +150				°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

RATING AND CHARACTERISTIC CURVES (SR520 THRU SR5200)

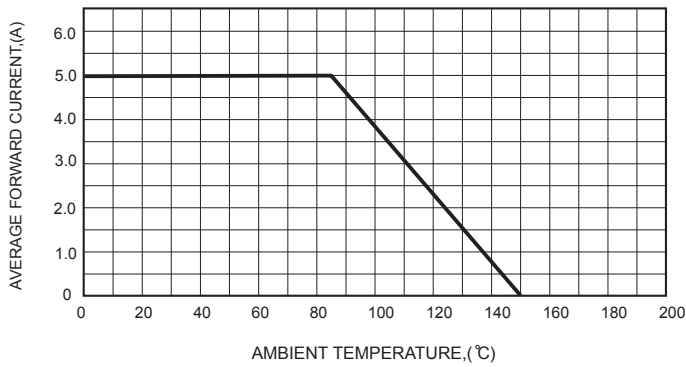### FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

FIG.2-TYPICAL FORWARD CHARACTERISTICS

FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT
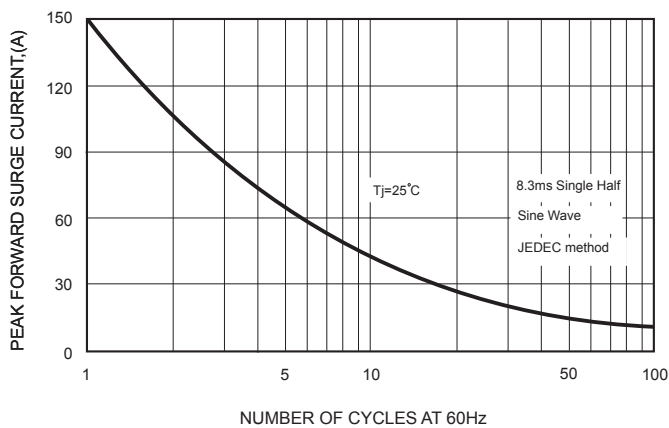
FIG.4-TYPICAL JUNCTION CAPACITANCE

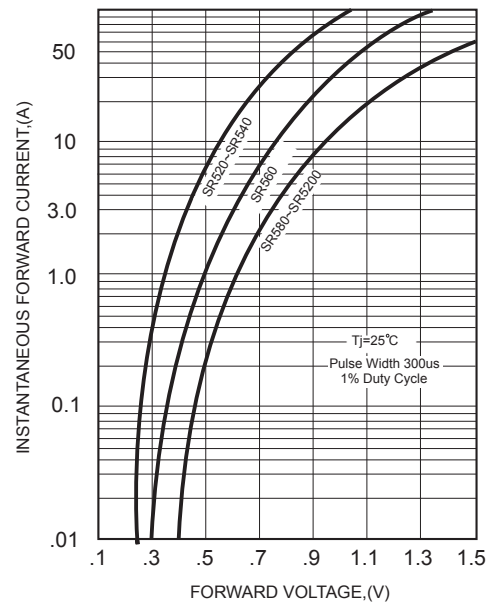### FIG.5 - TYPICAL REVERSE CHARACTERISTICS