SR1020 THRU SR10100

10.0AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

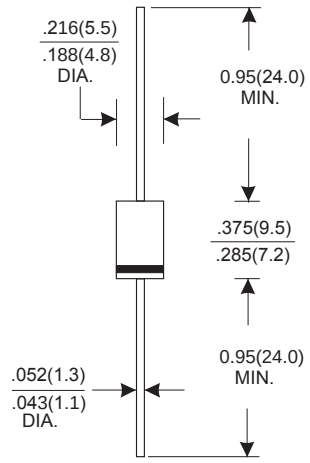
* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability
* Epitaxial construction

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: 1.04 grams
* Lead Free Finish/RoHS Compliant

VOLTAGE RANGE
20 to 100 Volts
CURRENT
10.0 Amperes

DO-27



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SR1020	SR1030	SR1040	SR1045	SR1050	SR1060	SR1080	SR10100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	45	50	60	80	100	V
Maximum RMS Voltage	14	21	28	32	35	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	45	50	60	80	100	V
Maximum Average Forward Rectified Current See Fig. 1	10.0								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 10.0A	0.55				0.70		0.85		V
Maximum DC Reverse Current Ta=25°C	500								uA
at Rated DC Blocking Voltage Ta=100°C	100								mA
Typical Junction Capacitance (Note1)	250								pF
Typical Thermal Resistance RθJA (Note 2)	20								°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.

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RATING AND CHARACTERISTIC CURVES (SR1020 THRU SR10100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

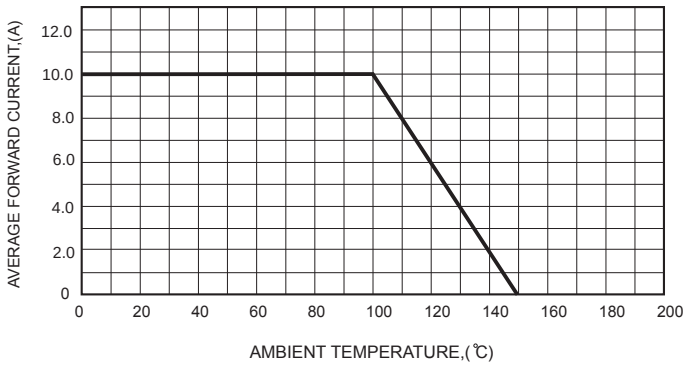


FIG.2-TYPICAL FORWARD CHARACTERISTICS

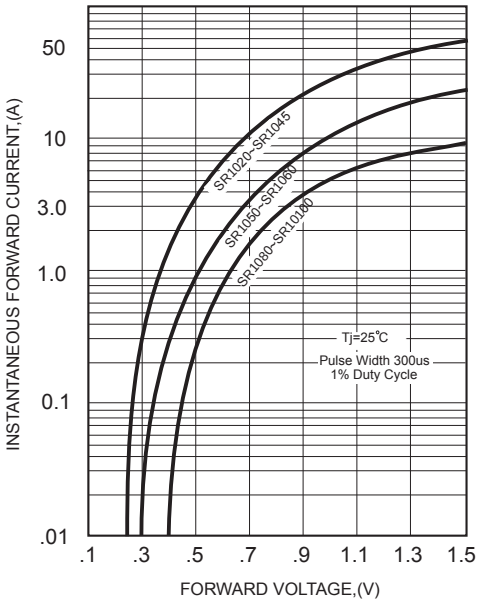


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

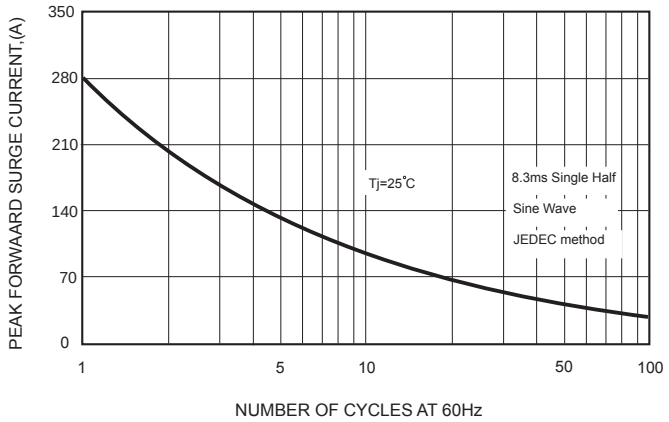


FIG.4-TYPICAL JUNCTION CAPACITANCE

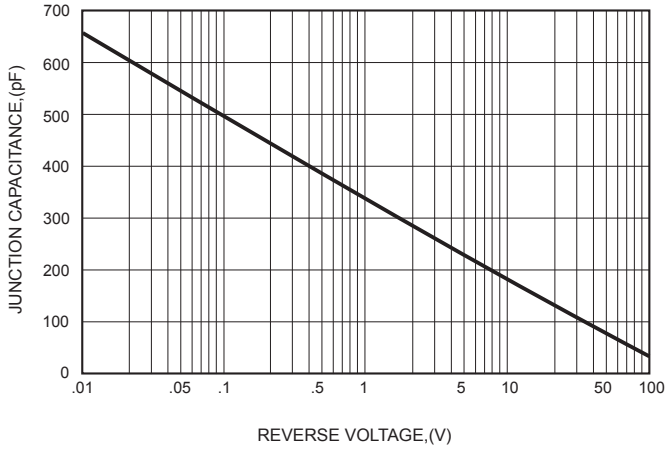
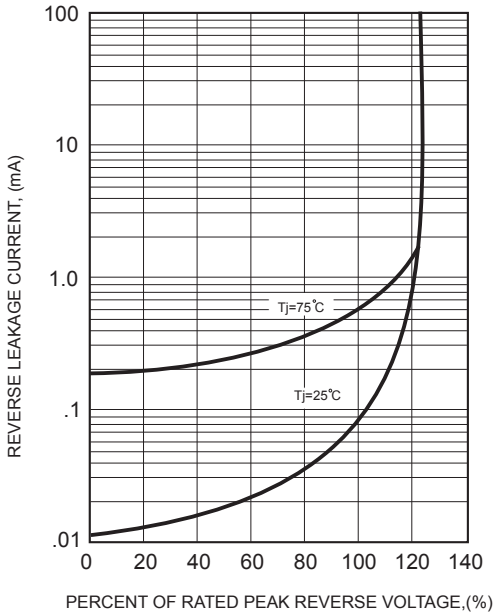


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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