

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

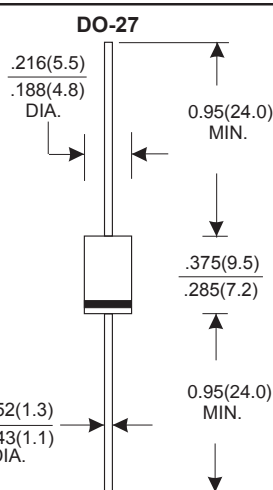
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.04 grams
- * Lead Free Finish/RoHS Compliant

VOLTAGE RANGE

20 to 100 Volts

CURRENT

10.0 Amperes



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									A	
See Fig. 1									10.0	
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.

RATING AND CHARACTERISTIC CURVES (SR1020 THRU SR10100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

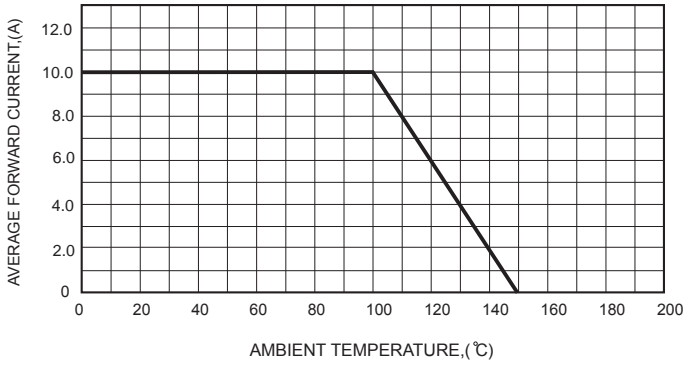


FIG.2-TYPICAL FORWARD CHARACTERISTICS

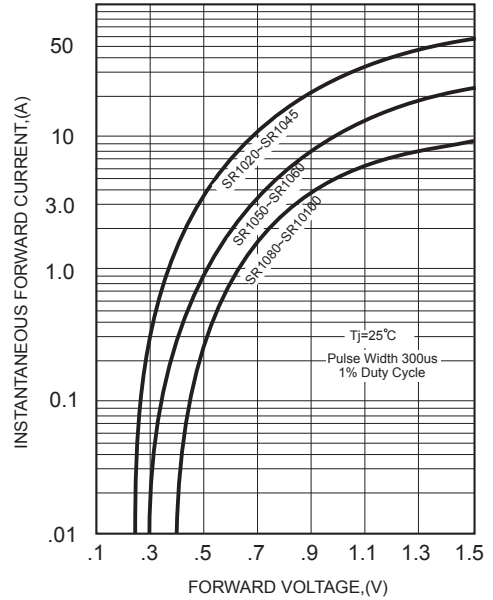


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

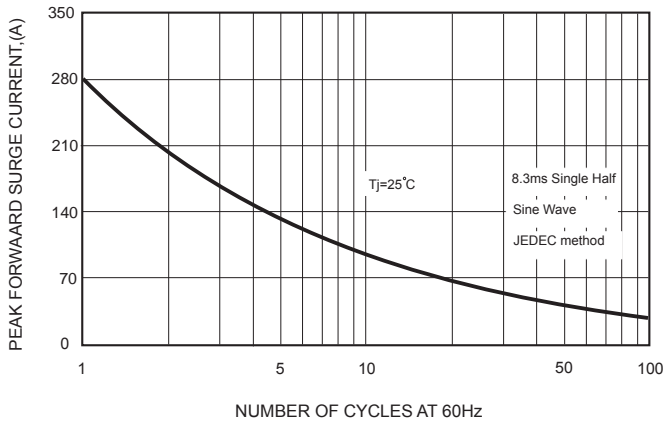


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

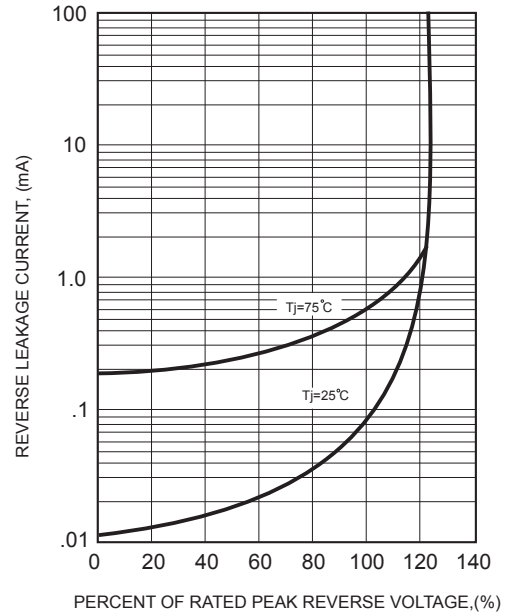


FIG.4-TYPICAL JUNCTION CAPACITANCE

