SR3150

3.0 AMP SCHOTTKY BARRIER RECTIFIERS

GW

VOLTAGE RANGE
150 Volts
CURRENT
3.0 Amperes

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: 1.10 grams

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	SR3150	UNITS
Maximum Recurrent Peak Reverse Voltage	150	V
Working Peak Reverse Voitage	150	V
Maximum DC Blocking Voltage	150	V
Maximum Average Forward Rectified Current See Fig. 1	3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	80	A
Maximum Instantaneous Forward Voltage at 3.0A	0.90	V
Maximum DC Reverse Current Ta=25˚C	0.05	mA
at Rated DC Blocking Voltage Ta=100˚C	10	mA
Typical Junction Capacitance (Note1)	300	pF
Typical Thermal Resistance R JA (Note 2)	10	˚C/W
Operating Temperature Range T_J	-50 — +150	˚C
Storage Temperature Range T_{STG}	-65 — +150	˚C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.

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

REVISE FOR LEAD WIRE LENGTH TO 24.0mm AND DIAMETER FROM 1.2mm TO 1.1mm **EFFECTED : 2007/6/1**

RATING AND CHARACTERISTIC CURVES (SR3150)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

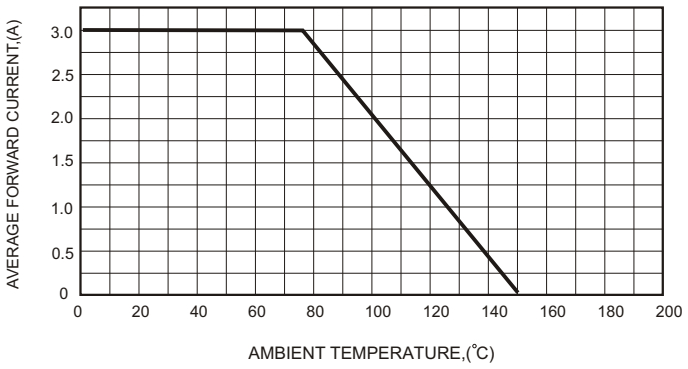

FIG.2-TYPICAL FORWARD CHARACTERISTICS

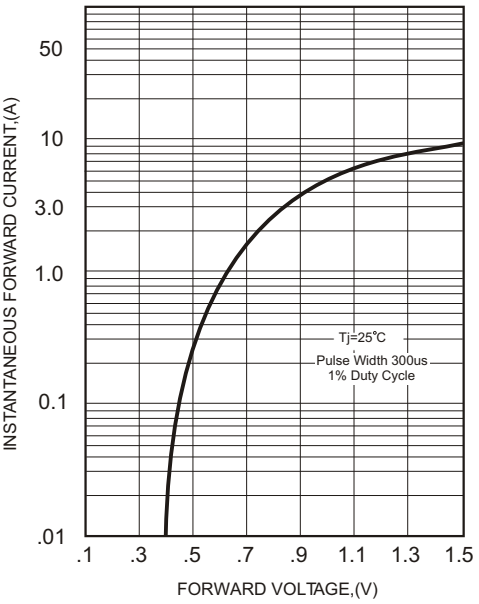

FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

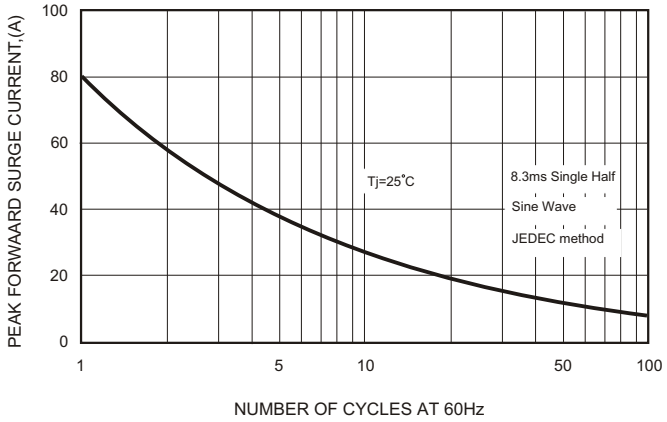

FIG.4-TYPICAL JUNCTION CAPACITANCE

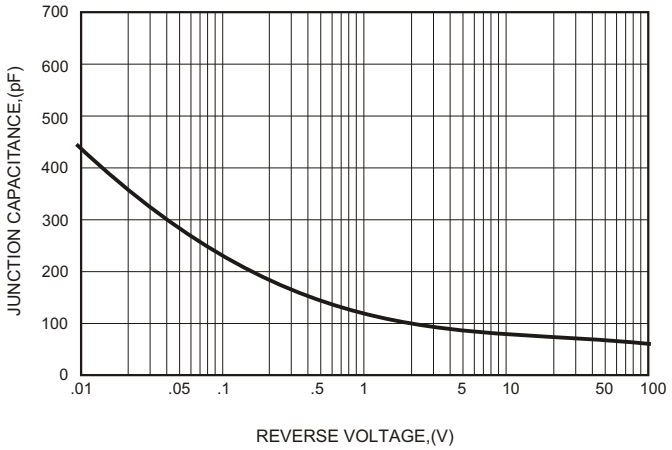

FIG.5 - TYPICAL REVERSE CHARACTERISTICS