

SR802 - SR815

8.0 AMPS. Schottky Barrier Rectifiers

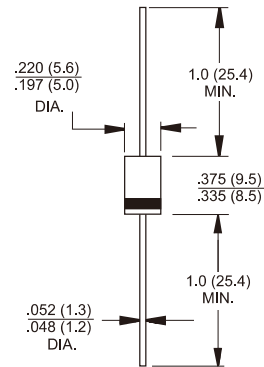
DO-201AD

Features

- ✧ Low power loss, high efficiency.
- ✧ High current capability, Low VF.
- ✧ High reliability
- ✧ High surge current capability.
- ✧ Epitaxial construction.
- ✧ Guard-ring for transient protection.
- ✧ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- ✧ Cases: DO-201AD molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Lead: Pure tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375" (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 1.10 grams



Dimensions in inches and (millimeters)

Marking Diagram



SR8XX = Specific Device Code
G = Green Compound
Y = Year
WW = Work Week

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	Symbol	SR 802	SR 803	SR 804	SR 805	SR 806	SR 809	SR 810	SR 815	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	90	100	150	V
Maximum RMS Voltage	VRMS	14	21	28	35	42	63	70	105	V
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	90	100	150	V
Maximum Average Forward Rectified Current See Fig. 1	IF(AV)	8.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	150								A
Maximum Instantaneous Forward Voltage @8.0A	VF	0.55			0.70		0.92		1.02	V
Maximum D.C. Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100 °C (Note 1) @ TA=125 °C	IR	0.5				0.1				mA
		15		10		—				mA
		—				5				mA
Typical Junction Capacitance (Note 2)	Cj	500			270		165			pF
Typical Thermal Resistance (Note 3)	RθJA	40								°C/W
Operating Junction Temperature Range	TJ	-65 to +125			-65 to +150					°C
Storage Temperature Range	TSTG	-65 to +150								°C

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.
3. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.

Version: D10

RATINGS AND CHARACTERISTIC CURVES (SR802 THRU SR815)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

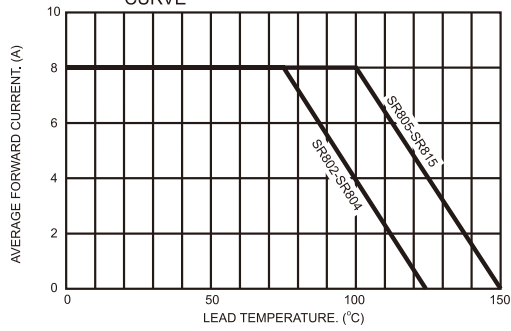


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

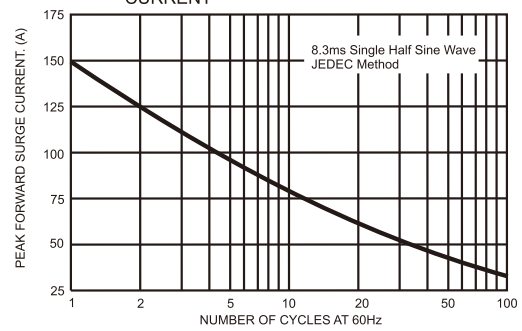


FIG.3- TYPICAL FORWARD CHARACTERISTICS

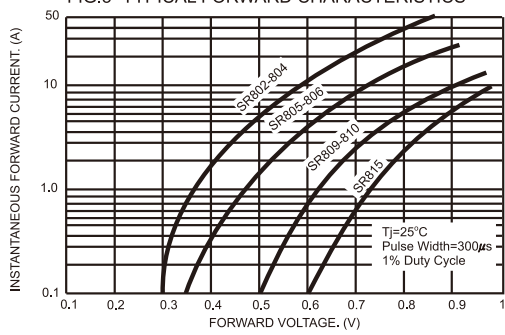


FIG.4- TYPICAL REVERSE CHARACTERISTICS

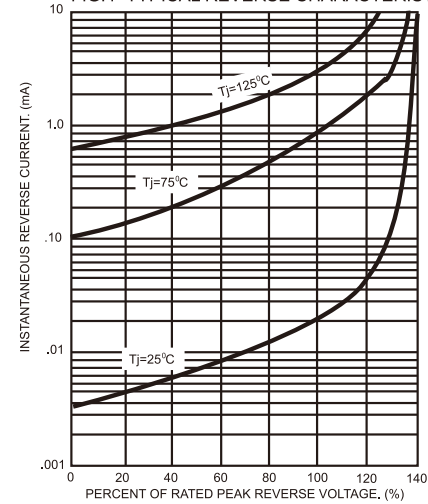


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

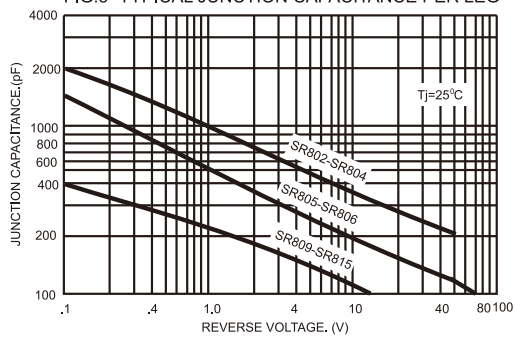
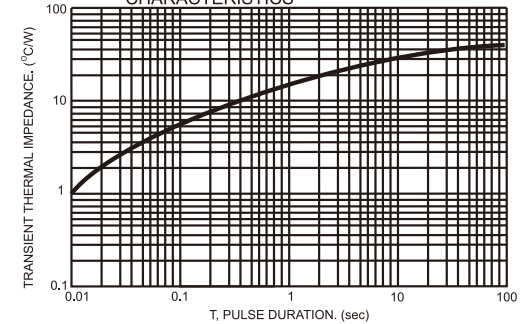


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



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