YEA SHIN TECHNOLOGY CO., LTD

SR802 THRU SR815

Schottky Barrier Rectifiers
VOLTAGE 20 to 150 V CURRENT 8.0 A

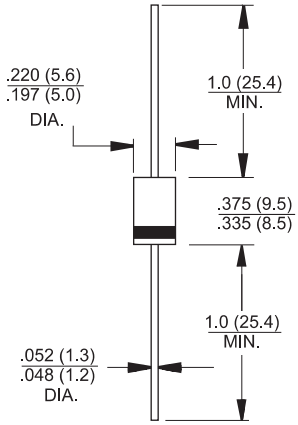
Features

- 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 inventor, free wheeling, and polarity protection application

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℃/10 seconds/.375",(9.5mm) lead
- lengths at 5 lbs., (2.3kg) tension

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SR802	SR803	SR804	SR805	SR806	SR808	SR810	SR815	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	V
Maximum Average Forward Rectified Current See Fig.1	$I_{F(AV)}$	8								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150								A
I^2t Rating for Fusing (t<8.3ms)	I^2t	93.4								A^2S
Maximum Instantaneous Forward Voltage at 8A	V_F	0.55			0.70		0.92		1.02	V
Maximum DC Reverse Current at T_A=25℃	I_R	0.5					0.1			mA
at Rated DC Blocking Voltage T_A=125℃		15			10		5			mA
Typical Junction Capacitance (Note 1)	C_J	500			270		165			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40								℃/W
Operating Junction Temperature Range	T_J	-55 to +125			-55 to +150					℃
Storage Temperature Range	T_{STG}	-55 to +150								℃

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.
2. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.

DEVICE CHARACTERISTICS

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FIG.1-MAXIMUM FORWARD CURRENT DERATING CURVE

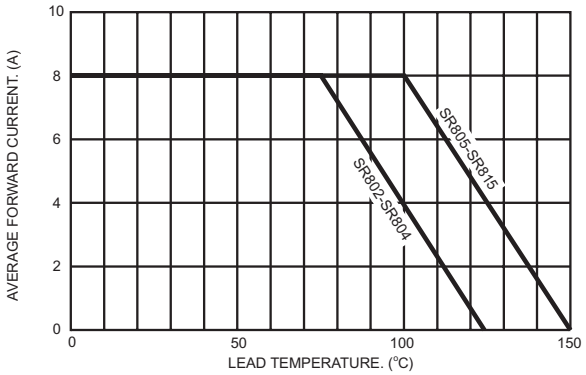

FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

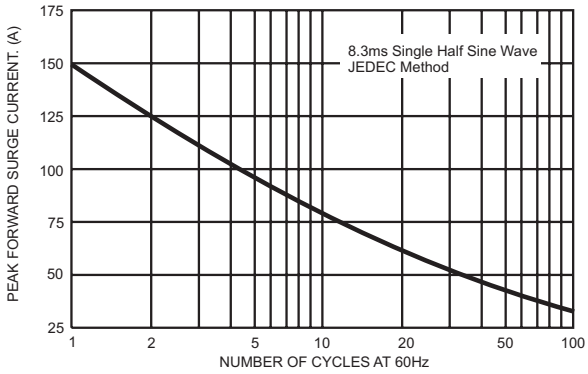

FIG.3- TYPICAL FORWARD CHARACTERISTICS

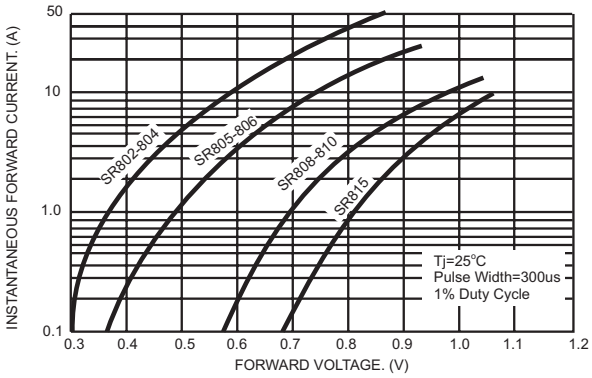

FIG.4- TYPICAL REVERSE CHARACTERISTICS

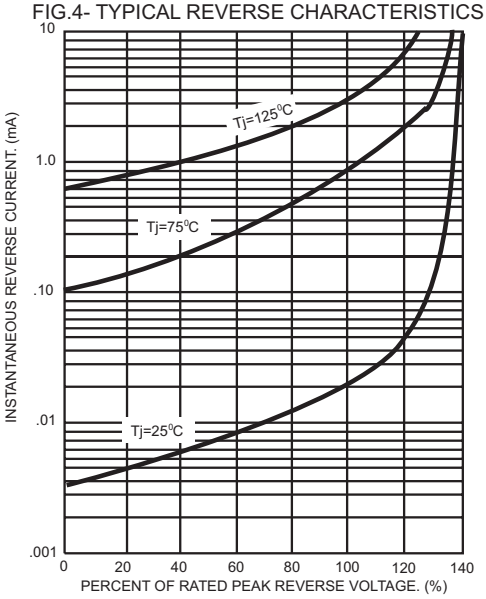

FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

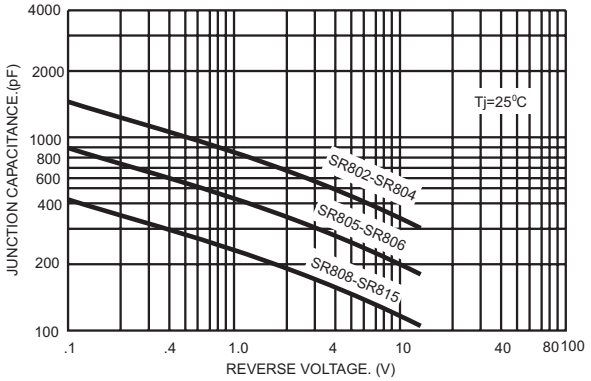

FIG.6-TYPICAL TRANSIENT THERMAL CHARACTERISTICS