

II. Schottky Rectifier

8.0A Schottky Rectifier SR820~SR8100

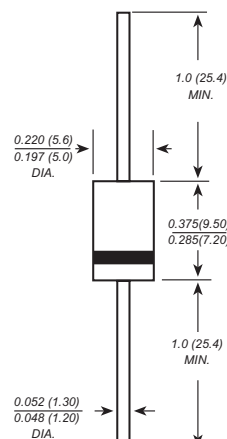
(Package: DO-201AD)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High forward surge current capability
- High temperature soldering guaranteed

MECHANICAL DATA

- Case : JEDEC DO-201AD molded plastic body
- Terminals : Plated axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 1.10 grams, 0.04 ounce



Case: DO-201AD
Dimensions in inches and (millimeters)

Ratings & Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	SR 820	SR 830	SR 835	SR 840	SR 845	SR 850	SR 860	SR 880	SR 8100	Units	
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	35	40	45	50	60	80	100	Volts	
Maximum RMS voltage	V_{RMS}	14	21	24	28	31	35	42	56	70	Volts	
Maximum DC blocking voltage	V_{DC}	20	30	35	40	45	50	60	80	100	Volts	
Maximum average forward rectified current at derating lead temperature	I_O	8.0									Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150									Amps	
Maximum instantaneous forward voltage at 8.0A DC	V_F	0.65			0.85					Volts		
Maximum DC reverse current at rated DC blocking voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	I_R	5.0									mA	
		50										
Typical thermal resistance (Note 1)	R_{th-JC}	3.0									$^\circ\text{C/W}$	
Typical junction capacitance (Note 2)	C_j	700					460					PF
Operating junction temperature range	T_j	-65 to +125					-65 to +150					$^\circ\text{C}$
Storage temperature range	T_{stg}	-65 to +150									$^\circ\text{C}$	

Notes:

1. Thermal resistance : Junction to Case

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

Ratings and Characteristic Curves of SR820~SR8100

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

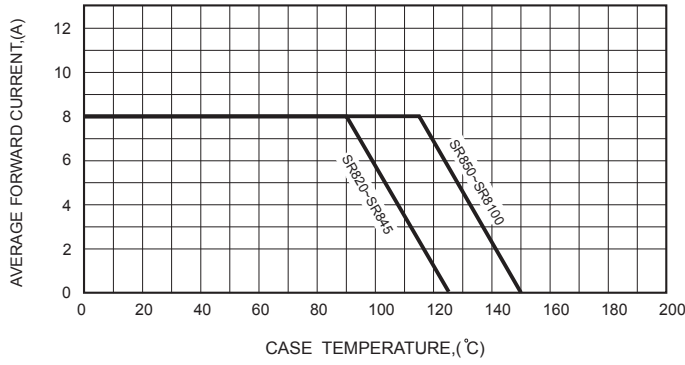


FIG.2-TYPICAL FORWARD CHARACTERISTICS

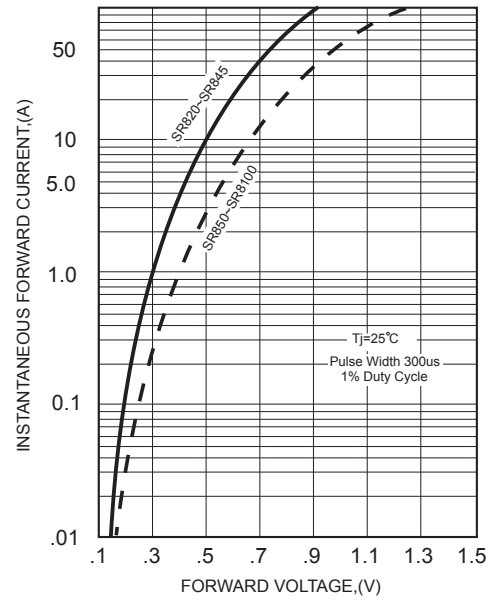


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

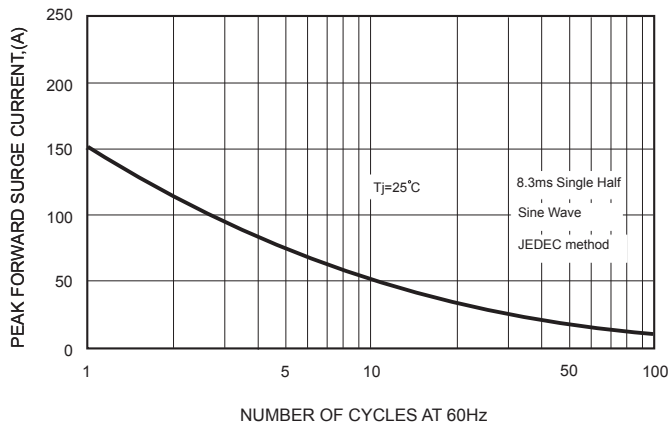


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

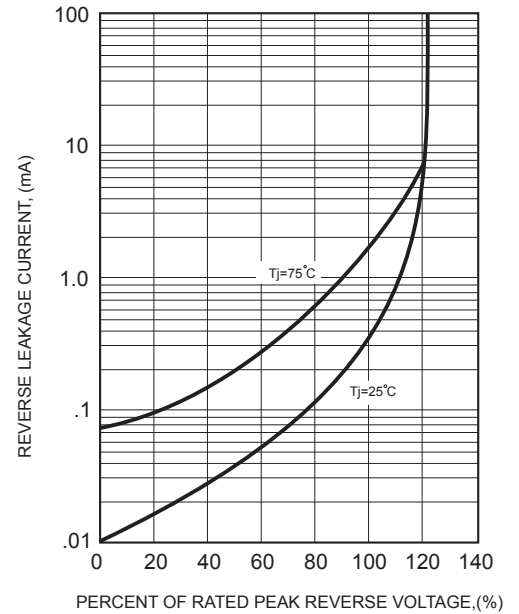


FIG.4-TYPICAL JUNCTION CAPACITANCE

