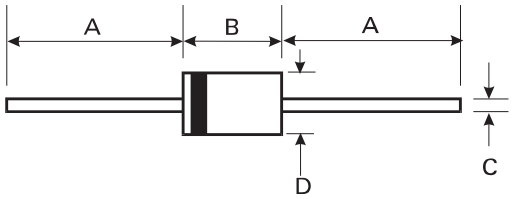
SD830 - SD845

HIGH CURRENT SCHOTTKY BARRIER RECTIFIER

Features

- Plastic package has Underwriters Lab flammability Classification 94V-0
- High current capability and low forward drop
- High surge capacity
- Guard Ring for transient protection
- Low power loss, high efficiency

DO-201AD



	Min	Max
A	25.4	—
B	—	9.5
C	1.2	1.3
D	4.8	5.2
All Dimensions in mm		

Mechanical Data

- TERMINALS: Axial lead, solderable per MIL-STD-202, Method 208
- CASE: Molded Plastic
- MOUNTING POSITION: Any
- POLARITY: Cathode band
- WEIGHT: 1.20 gram

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.

Characteristic	Symbol	SD830	SD840	SD845	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	40	45	V
Maximum RMS Voltage	V_{RSM}	21	28	31.5	V
Maximum DC Blocking Voltage	V_{DC}	30	40	45	V
Maximum Average Forward Rectified Current T_L=90°C	$I_{(AV)}$	8.0			A
Peak Forward Surge current 8.3ms half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	175			A
Maximum Forward Voltage at 8.0A	V_F	0.55			V
Maximum Average Reverse Current at T_A= 25°C Peak Reverse Voltage T_A=100°C	I_R	1.0 50			mA
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	30			°C/W
Typical Junction Capacitance (Note 2)	C_J	550			pF
Storage and Operating Temperature Range	T_J, T_{STG}	-65 to +150			°C

NOTE: 1. Thermal Resistance from Junction to Lead Vertical PC Board Mounting, 9.5mm Lead Length.
2. Measured at 1MHz and applied reverse voltage of 4.0 Volts.

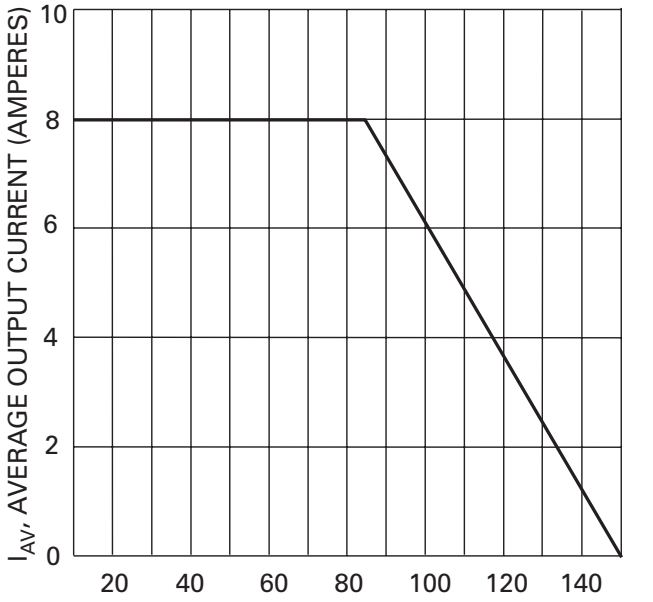


Fig. 1 Forward Current Derating Curve

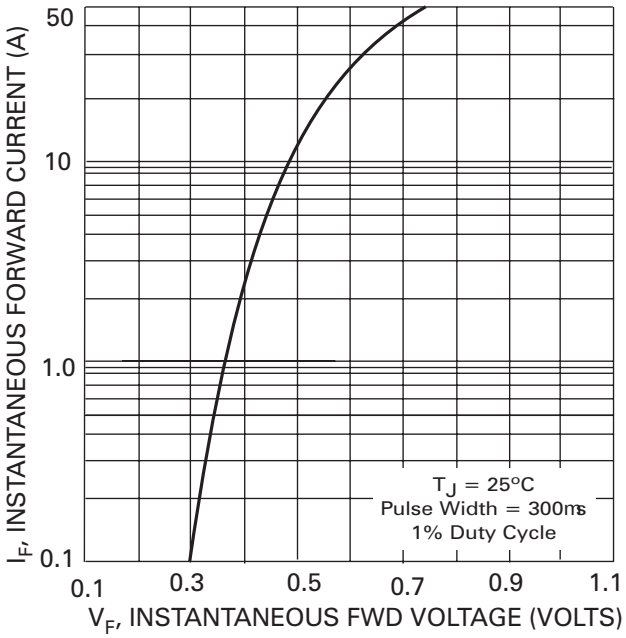


Fig. 2 Typical Forward Characteristics

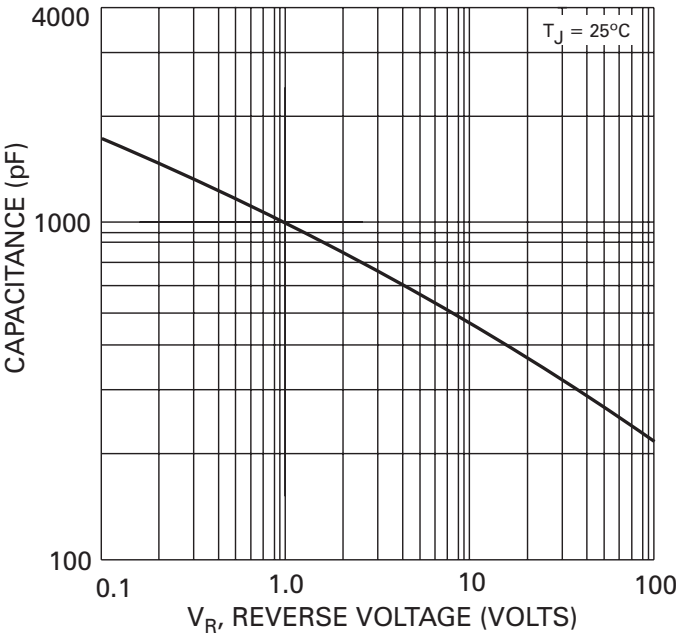


Fig. 3 Typical Junction Capacitance

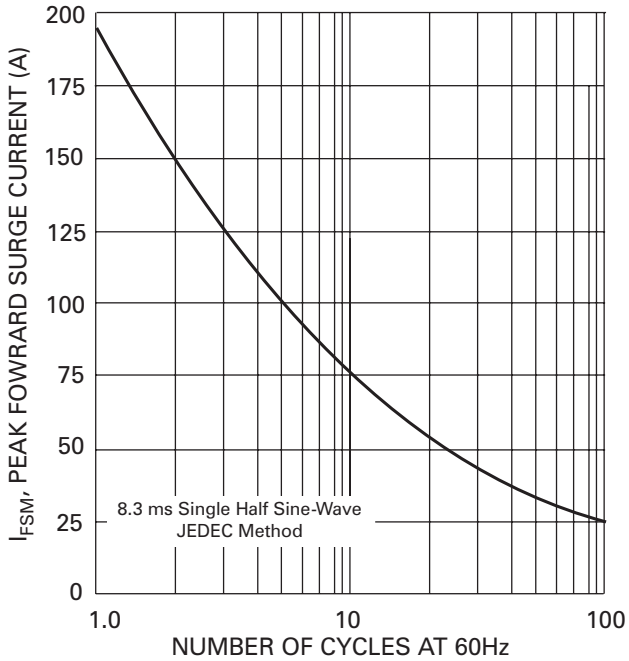


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current