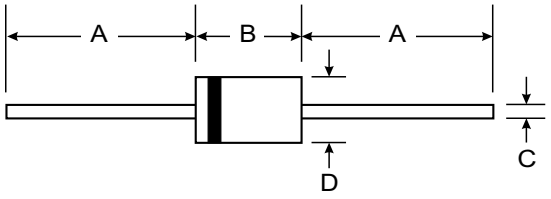
SD830 - SD860

8.0A SCHOTTKY BARRIER RECTIFIERS

Features

- High Current Capability and Low Forward Drop
- High Surge Capacity
- Guard Ring for Transient Protection
- Low Power Loss, High Efficiency
- Plastic Package has UL Flammability Classification 94V-0



DO-201AD		
Dim	**Min**	**Max**
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Mechanical Data

- Case: DO-201AD, Molded Plastic
- Leads: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode band
- Approx. Weight: 1.1 grams
- Mounting Position: Any

Maximum Ratings and Electrical Characteristics @ TA = 25°C unless otherwise specified

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

Characteristic	Symbol	SD830	SD840	SD845	SD860	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	40	45	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	28	31.5	42	V
Maximum Average Forward Rectified Current T_L=90°C	I_O	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			0.70	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				K/W
Typical Junction Capacitance (Note 2)	C_j	550				pF
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150				°C

Notes: 1. Thermal Resistance from Junction to Lead Vertical PC Board Mounting, 9.5mm Lead Length.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V.

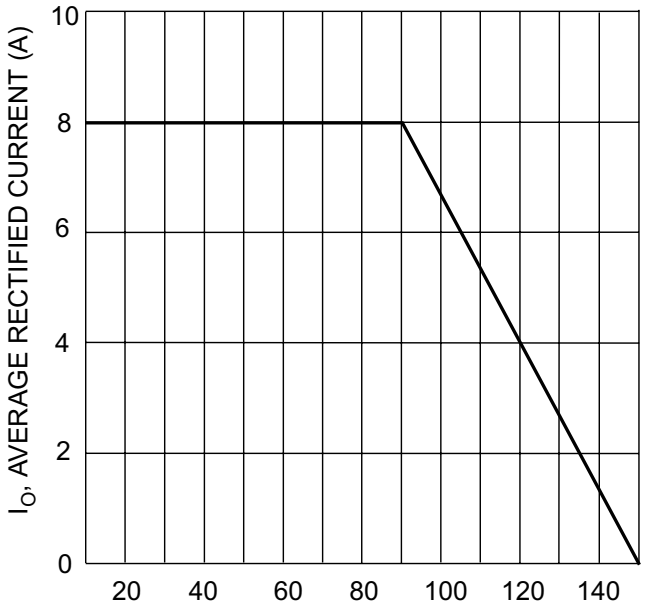


Fig. 1 Forward Current Derating Curve

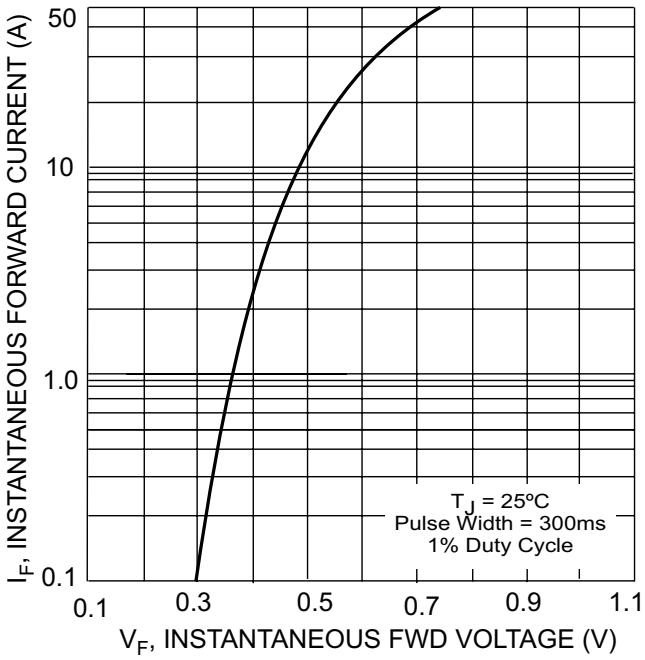


Fig. 2 Typical Forward Characteristics

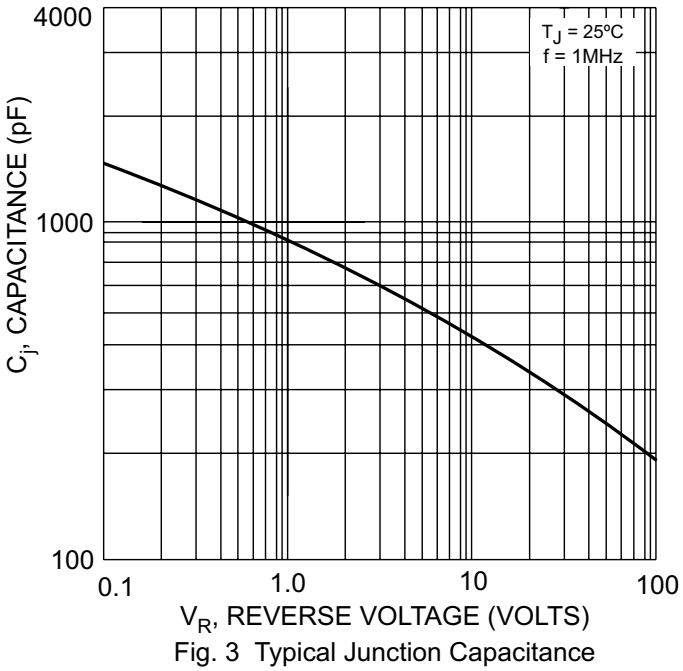


Fig. 3 Typical Junction Capacitance

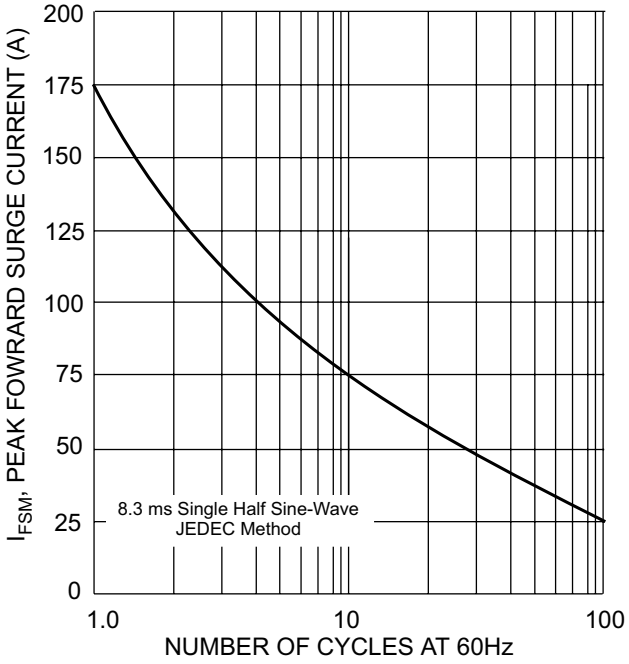


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current