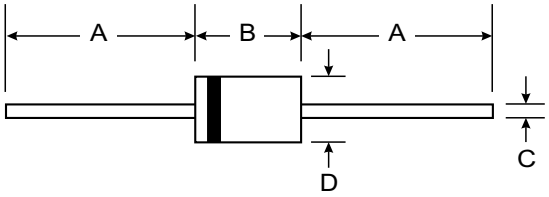
SR302 - SR306

HIGH CURRENT SCHOTTKY BARRIER RECTIFIER

NOT RECOMMENDED FOR NEW DESIGNS, USE SB3X0 SERIES

Features

- Low Forward Drop
- High Surge Current Capacity
- Guard Ring for Transient Protection
- Low Power Loss, High Efficiency



Mechanical Data

- Case: DO-201AD, Molded Plastic
- Plastic Package: UL Flammability Classification Rating 94V-0
- Moisture sensitivity: Level 1 per J-STD-020A
- Terminals: Axial lead, Solderable per MIL-STD-202, Method 208
- Polarity: Cathode band
- Weight: 1.2 grams (approx.)

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		

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

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

Characteristic	Symbol	SR302	SR303	SR304	SR305	SR306	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	V
Average Rectified Output Current (Note 1) T_L = 95°C T_L = 100°C	I_O	3.0 —			— 3.0		A
Non-repetitive Peak Forward Surge Current 8.3ms half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80					A
Forward Voltage @I_F = 3.0A	V_F	0.55			0.72		V
Peak Reverse Current at @ T_A = 25°C Rated DC Blocking Voltage @ T_A = 100°C	I_R	1.0 20					mA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20					°C/W
Typical Total Capacitance (Note 3)	C_T	300					pF
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150					°C

Notes: 1. Lead Temperature T_L measured 9.5mm lead length from body.
2. Thermal Resistance from Junction to Ambient Vertical PC Board Mounting, 1.27mm Lead Length.
3. Measured at 1.0MHz and applied reverse voltage of 4.0V.

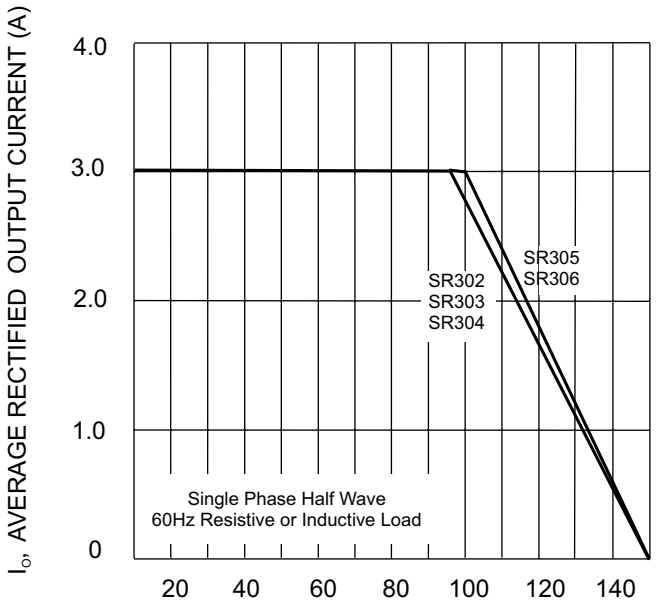


Fig. 1, Forward Current Derating Curve

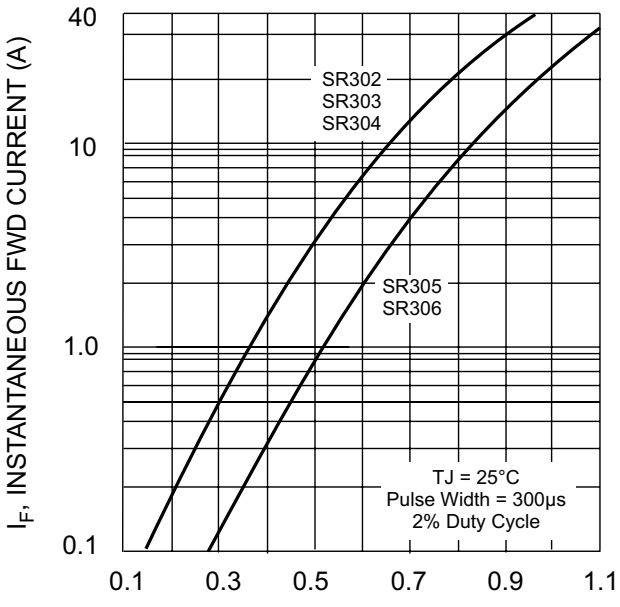


Fig. 2, Typical Forward Characteristics

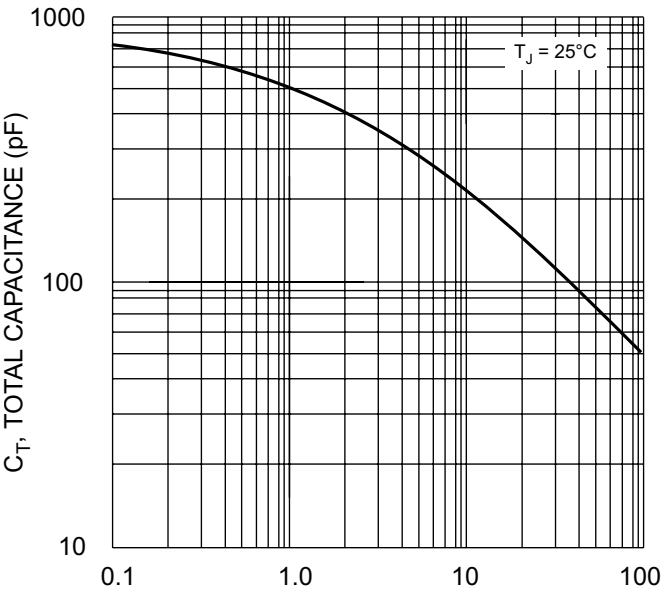


Fig. 3, Typical Total Capacitance

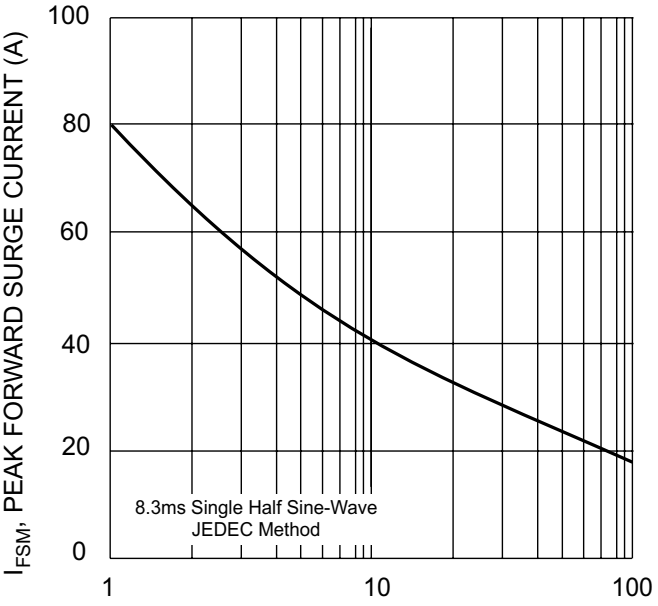


Fig. 4, Max Non-Repetitive Peak Fwd Surge Current