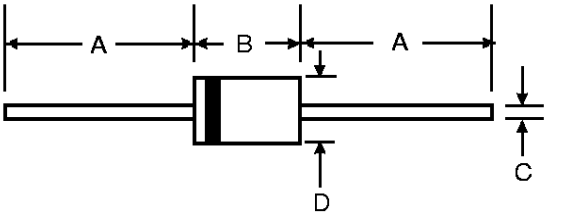
SR302 - SR306

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		
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
- Terminals: Axial lead, solderable per MIL-STD-202, Method 208
- Mounting Position: Any
- Polarity: Cathode band
- Approx. Weight: 1.2 gram

Maximum Ratings and Electrical Characteristics

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

Characteristic	Symbol	SR302	SR303	SR304	SR305	SR306	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V_{RSM}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	V
Maximum Average Forward Rectified Current @ Lead temperature (T_L) T_L = 95°C / T_L = 100°C measured 9.5mm lead length from body	$I_{(AV)}$	3.0 / —			— / 3.0		A
Peak Forward Surge Current 8.3ms half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80					A
Maximum Forward Voltage at 1.0A	V_F	0.55			0.72		V
Maximum Average Reverse Current at T_A = 25°C / Peak Reverse Voltage T_A = 100°C	I_R	1.0 / 20					mA
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	20					°C/W
Typical Junction Capacitance (Note 2)	C_J	300					pF
Storage and Operating Temperature Range	T_J, T_{STG}	-65 to +150					°C

NOTE: 1. Thermal Resistance from Junction to Ambient Vertical PC Board Mounting, 1.27mm Lead Length.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V.

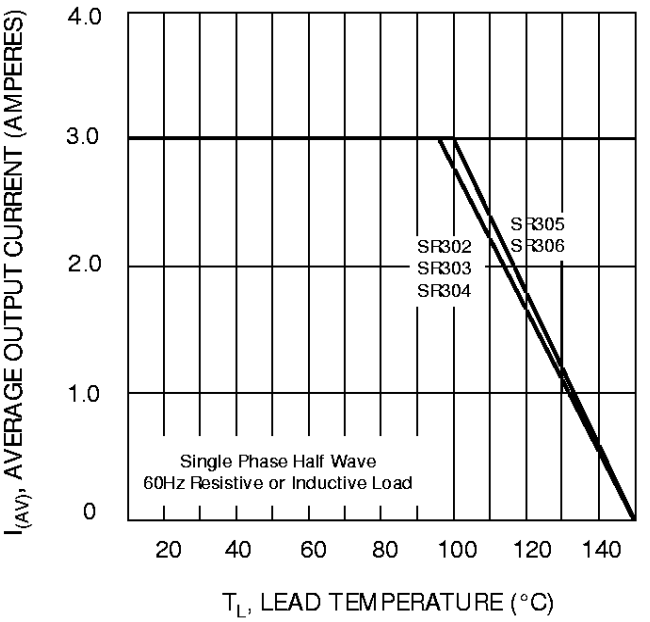


Fig. 1, Forward Current Derating Curve

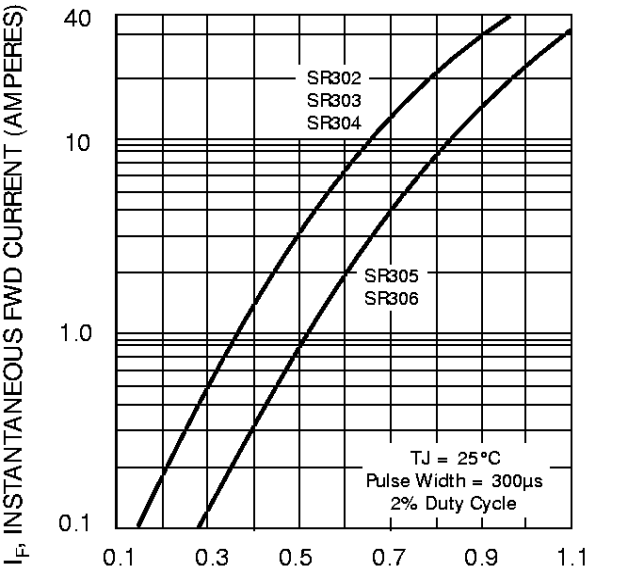


Fig. 2, Typical Forward Characteristics

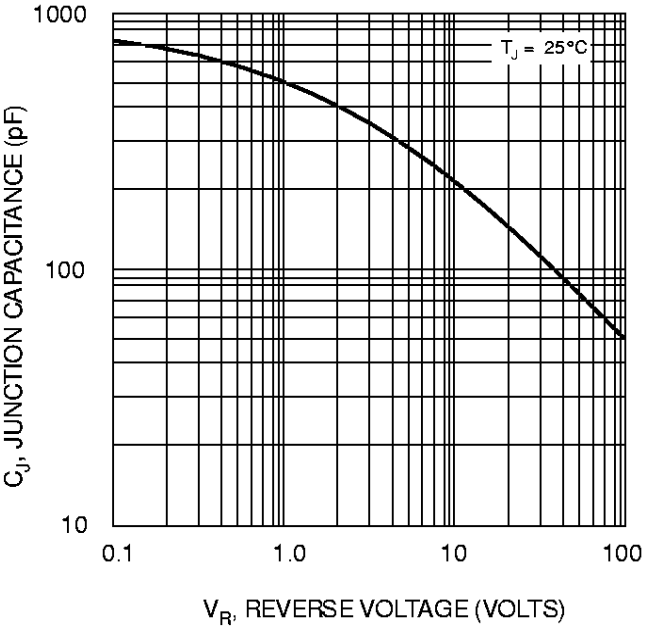


Fig. 3, Typical Junction Capacitance

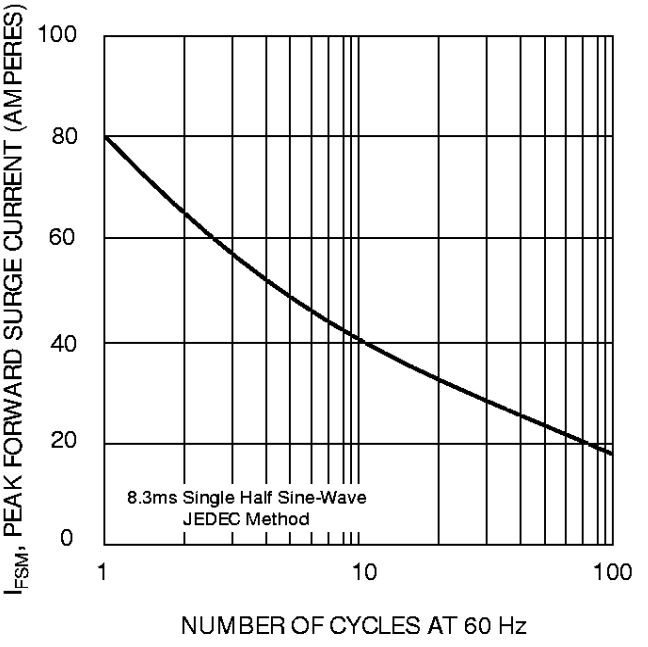


Fig. 4, Max Non-Repetitive Peak Fwd Surge Current