sapcon®

SR302 - SR3100

3.0A SCHOTTKY BARRIER DIODE

Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version,

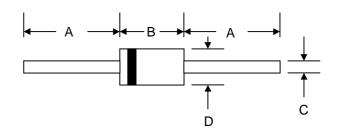
Maximum Ratings and Electrical Characteristics@T_A=25°C unless otherwise specified

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

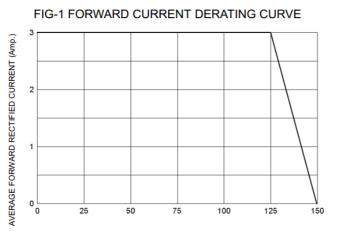
Characteristic	Symbol	SR302	SR303	SR304	SR305	SR306	SR308	SR3100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	20	30	40	50	60	80	100	V
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	56	70	V
Average Rectified Output Current $@T_L = 100^{\circ}C$ (Note 1)	lo	3.0					А		
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	100					A		
Forward Voltage $@I_F = 5.0A$	Vfm	0.55			0.70		0.85		V
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	Irm	0.5 20					mA		
Typical Junction Capacitance (Note 2)	Cj	210 190				pF			
Typical Thermal Resistance (Note 1)	RθJA	10					°C/W		
Operating and Storage Temperature Range	Tj, Tstg	-65 to +150						°C	

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

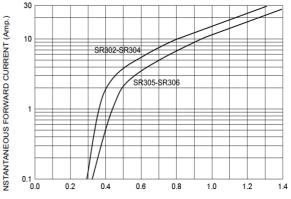


DO-201AD						
Dim	Min	Max				
Α	25.4	_				
В	7.20	9.50				
С	1.20	1.30				
D	4.80	5.30				
All Dimensions in mm						



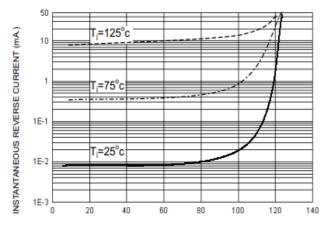
CASE TEMPERATURE (°C)

FIG-2 TYPICAL FORWARD CHARACTERISITICS

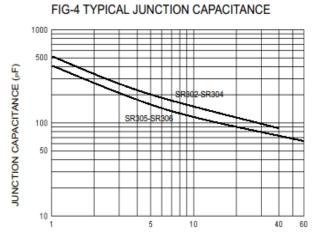


FORWARD VOLTAGE (Volts)

FIG-3 TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED REVERSE VOLTAGE (%)



REVERSE VOLTAGE (Volts)

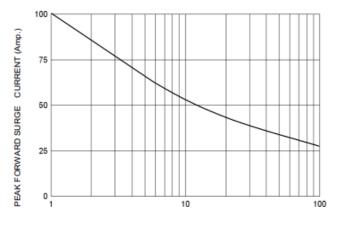


FIG-5 PEAK FORWARD SURGE CURRENT

NUMBER OF CYCLES AT 60 Hz