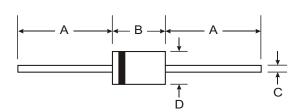


1N5820 - 1N5822

3.0A SCHOTTKY BARRIER RECTIFIERS

Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Application
- Plastic Material: UL Flammability Classification Rating 94V-0



DO-201AD					
Dim	Min	Max			
Α	25.40	_			
В	7.20	9.50			
С	1.20	1.30			
D	4.80	5.30			
All Dimensions in mm					

Mechanical Data

Case: Molded Plastic

 Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Polarity: Cathode Band Weight: 1.1 grams (approx)

Mounting Position: AnyMarking: Type Number

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	1N5820	1N5821	1N5822	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	20	30	40	V
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	V
Average Rectified Output Current (Note 1) @ T _L = 95°C	lo		3.0		А
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) @ T _L = 75°	I _{FSM}		80		А
Forward Voltage (Note 2)		0.475 0.850	0.500 0.900	0.525 0.950	V
Peak Reverse Current @ T _A = 25°0 at Rated DC Blocking Voltage (Note 2) @ T _A = 100°0		2.0 20		mA	
Typical Thormal Registence (Note 2)		40			°C/W
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	10			J 7 V V
Operating and Storage Temperature Range		-65 to +125			°C

Notes:

- 1. Measured at ambient temperature at a distance of 9.5mm from the case.
- 2. Short duration pulse test used to minimize self-heating effect.
- 3. Thermal resistance from junction to lead vertical P.C.B. mounted, 0.500" (12.7mm) lead length with 2.5 x 2.5" (63.5 x 63.5mm) copper pad.



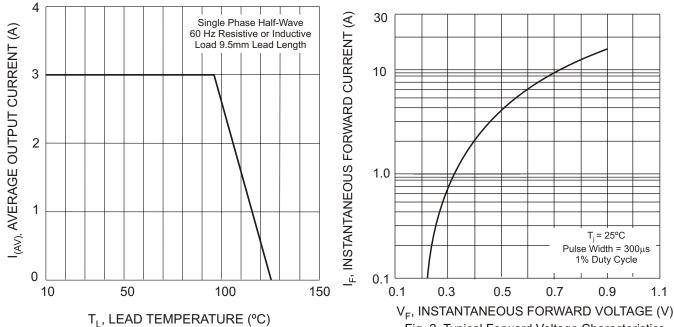


Fig. 1 Forward Current Derating Curve

