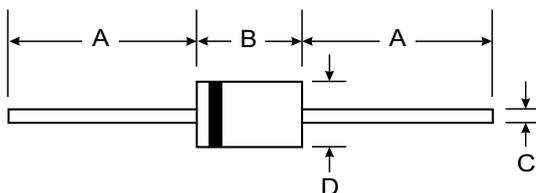


### Features

- 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
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: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.3 grams (approx)
- Mounting Position: Any
- Marking: Type Number

### Maximum Ratings and Electrical Characteristics

@ T<sub>A</sub> = 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	V <sub>RRM</sub>				
Working Peak Reverse Voltage	V <sub>RWM</sub>	20	30	40	V
DC Blocking Voltage	V <sub>R</sub>				
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	V
Average Rectified Output Current (Note 1)	I <sub>O</sub>		3.0		A
					@ T <sub>L</sub> = 90 °C
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>		80		A
					@ T <sub>L</sub> = 75 °C
Forward Voltage	V <sub>FM</sub>	0.475 0.850	0.500 0.900	0.525 0.950	V
					@ I <sub>F</sub> = 3.0A
					@ I <sub>F</sub> = 9.4A
Peak Reverse Current at Rated DC Blocking Voltage	I <sub>RM</sub>		2.0 20		mA
					@ T <sub>A</sub> = 25 °C
					@ T <sub>A</sub> = 100 °C
Typical Junction Capacitance (Note 2)	C <sub>j</sub>		250		pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>		20		K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>		-65 to +150		°C

- Notes: 1. Measured at ambient temperature at a distance of 9.5mm from the case.  
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

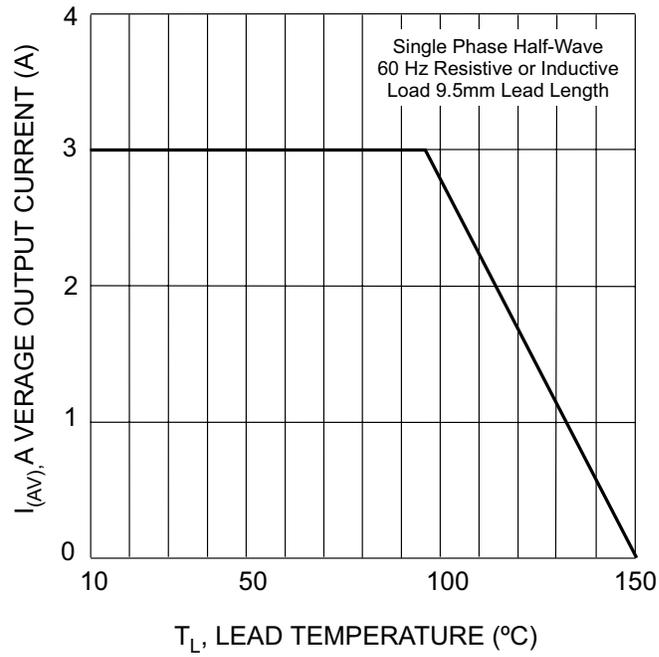


Fig. 1 Forward Current Derating Curve

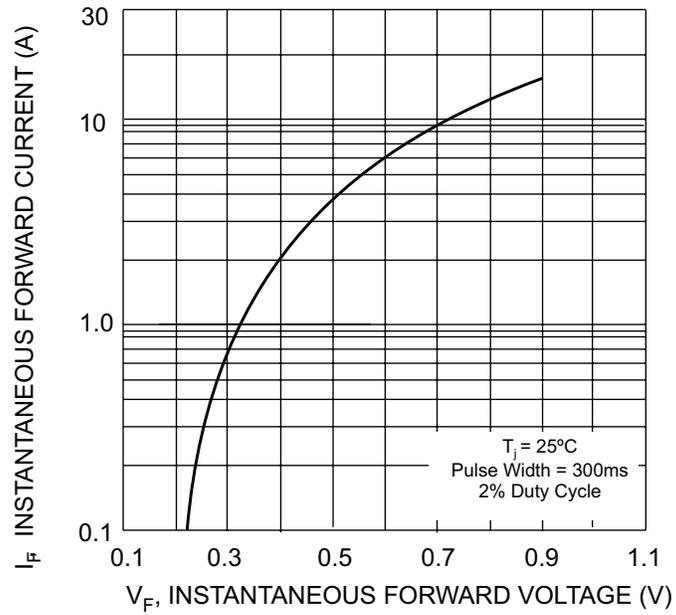


Fig. 2 Typical Forward Voltage Characteristics

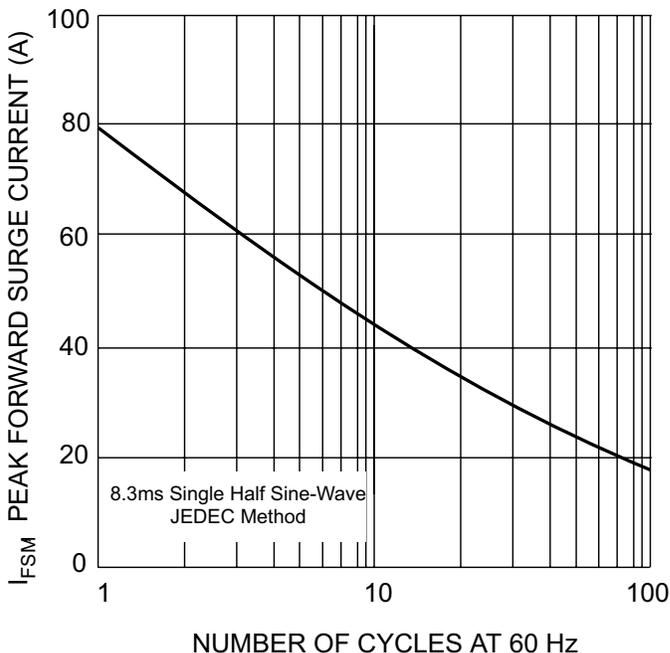


Fig. 3 Peak Forward Surge Current

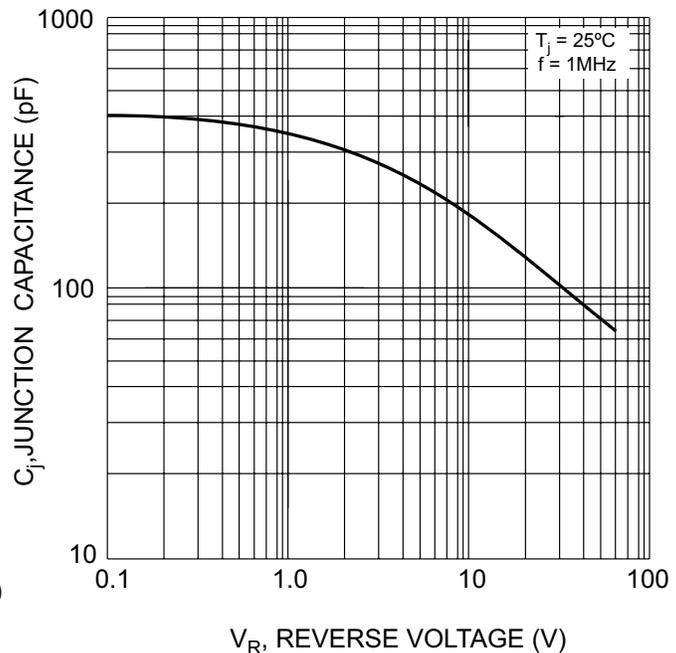


Fig. 4 Typical Junction Capacitance