

3A Schottky Barrier Rectifiers

Features

- Guardring for overvoltage protection
- Very small conduction losses
- Extremely fast switching
- Low forward voltage drop
- High forward surge capability
- High frequency operation
- For use in low voltage, high frequency inverters
- Solder dip 260 ° C, 10 seconds
- RoHS Compliance



DO-201AD



Mechanical Data

Case:	DO-201AD
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Pure tin plated leads, solderable per J-STD-002B and JESD22-B102D
Polarity:	Color band denotes cathode end
Weight:	0.04 ounce, 1.12 gram

Maximum Ratings and Electrical Characteristics ($T_A=25^\circ\text{C}$ unless noted otherwise)

Symbol	Description	1N5820	1N5821	1N5822	Unit	Conditions
VRRM	Maximum Repetitive Peak Reverse Voltage	20	30	40	V	
VRMS	Maximum RMS Voltage	14	21	28	V	
VDC	Maximum DC Blocking Voltage	20	30	40	V	
VRSM	Maximum Non-repetitive Peak Reverse Voltage	24	36	48	V	
IF(AV)	Maximum Average Forward Rectified Current	3.0			A	0.375" (9.5mm) lead length at $T_L=95^\circ\text{C}$

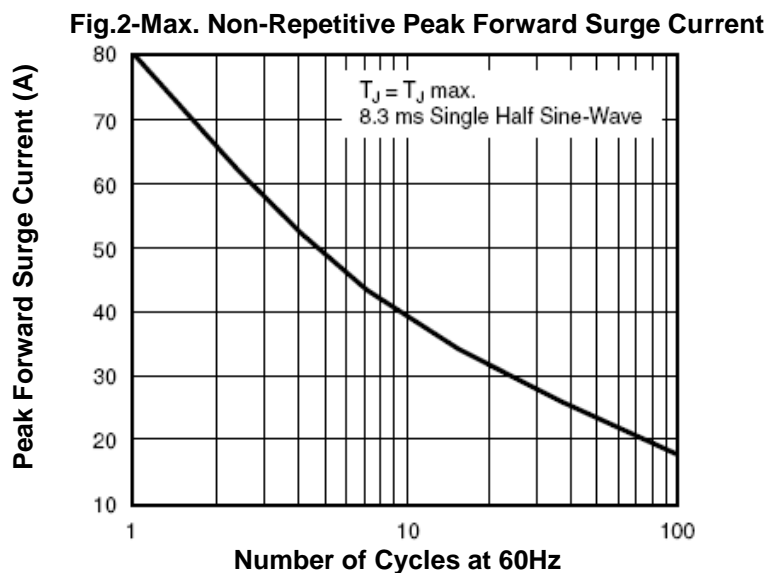
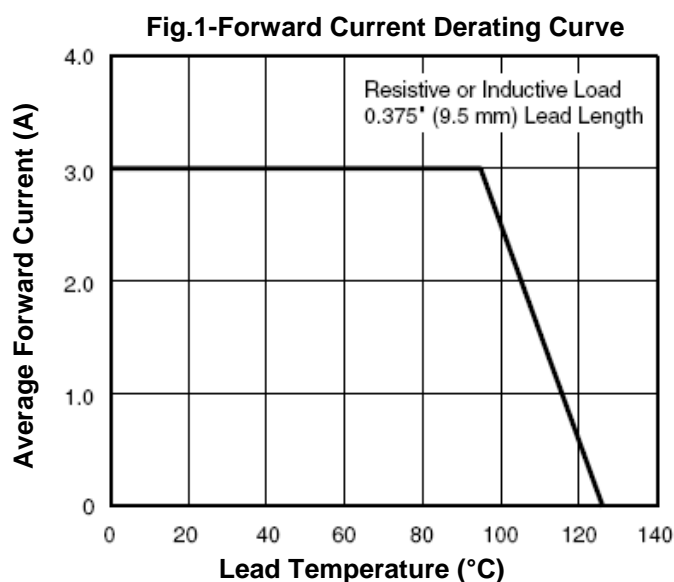
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1N5820 -1N5822

Symbol	Description	1N5820	1N5821	1N5822	Unit	Conditions
IFSM	Peak Forward Surge Current	80			A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
VF	Maximum Instantaneous Forward Voltage (Note 1)	0.475	0.50	0.525	V	IF=3.0A
IR	Maximum DC Reverse Current at Rated DC Blocking Voltage	0.5			mA	TA=25° C
		20				TA=100° C
RthJA	Typical Thermal Resistance	40			°C / W	Note 2
RthJL		10				
TJ, TSTG	Operating Junction and Storage Temperature Range	-65 to +125			° C	

Note: (1) Pulse test: 300µS pulse width, 1% duty cycle.
 (2) 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 pads.

Typical Characteristics Curves



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Fig.3- Typical Instantaneous Forward Characteristics

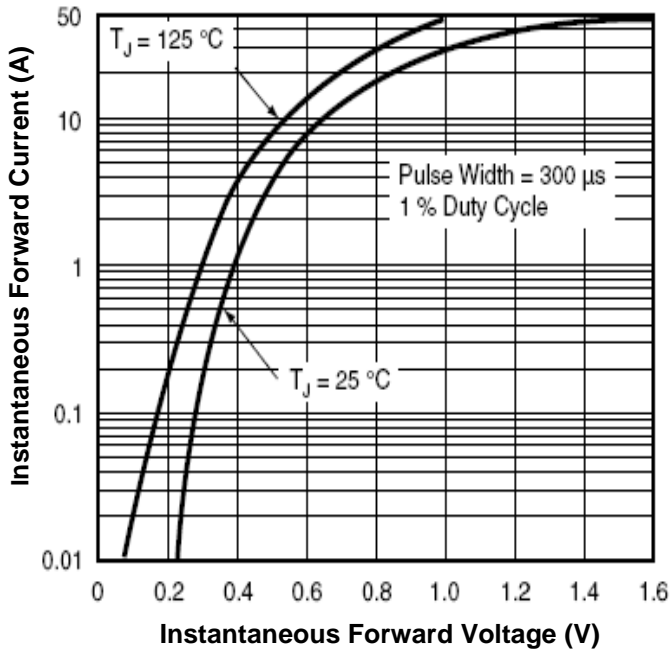


Fig.4-Typical Reverse Characteristics

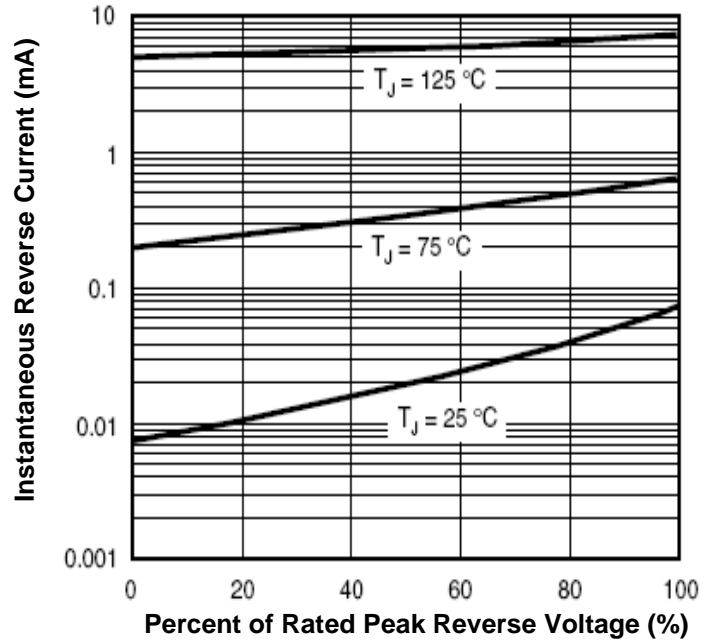
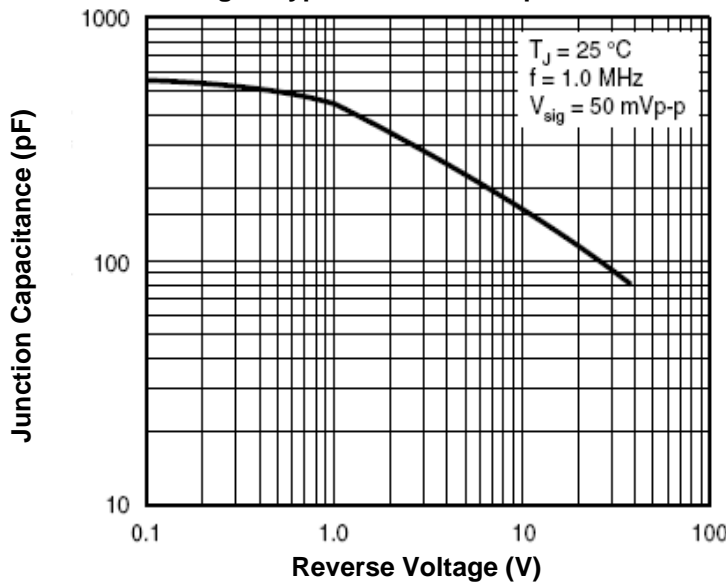


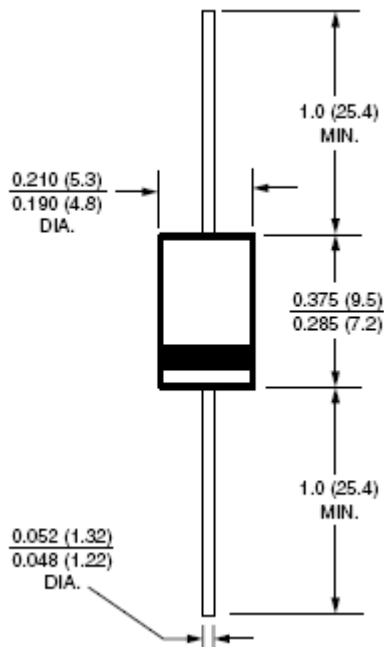
Fig.5- Typical Junction Capacitance



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Dimensions in inches (mm)



DO-201AD

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