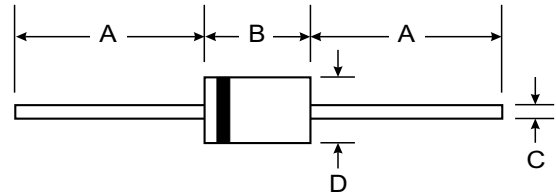
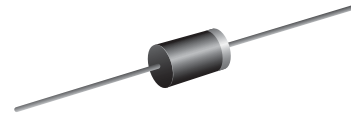


**VOLTAGE RANGE: 20 - 40V**  
**CURRENT: 3.0 A**

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Guardring for overvoltage protection
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed:  
 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



### 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

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		



### 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%.

	SYMBOLS	1N5820	1N5821	1N5822	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	VOLTS
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	VOLTS
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at T <sub>L</sub> =95°C	I <sub>(AV)</sub>	3.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	80.0			Amps
Maximum instantaneous forward voltage at 3.0A	V <sub>F</sub>	0.475	0.500	0.525	Volts
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	2.0 40.0			mA
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	300.0			pF
Typical thermal resistance (NOTE 2)	R <sub>qJA</sub>	40.0			°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +125			°C

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

FIG. 1- FORWARD CURRENT DERATING CURVE

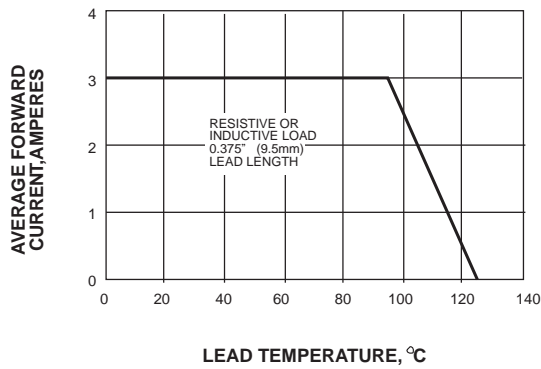


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

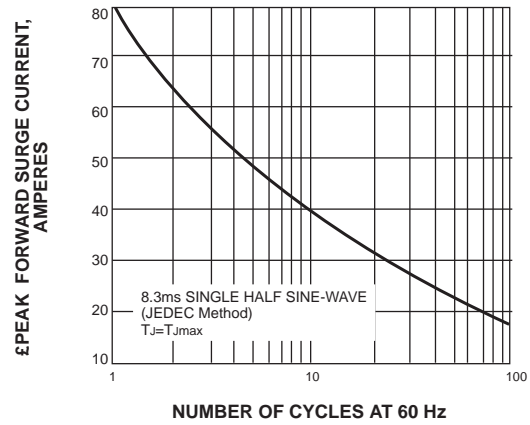


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

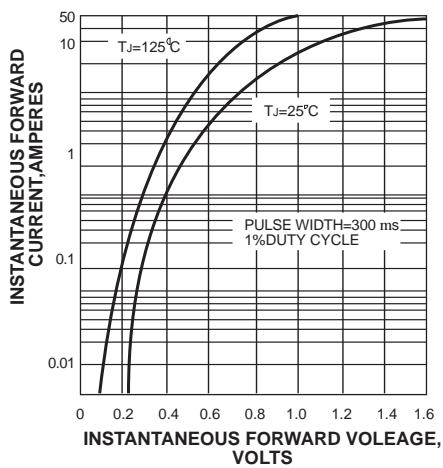


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

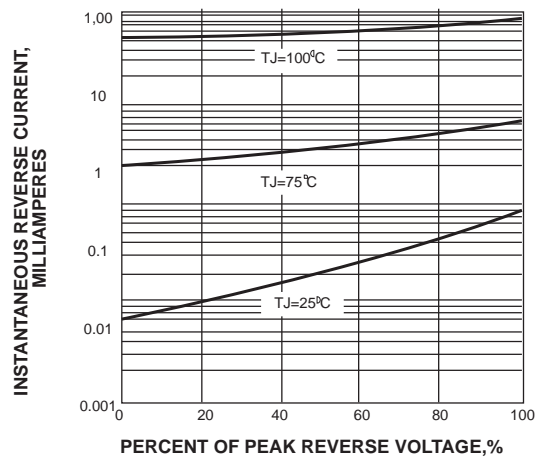


FIG. 5-TYPICAL JUNCTION CAPACITANCE

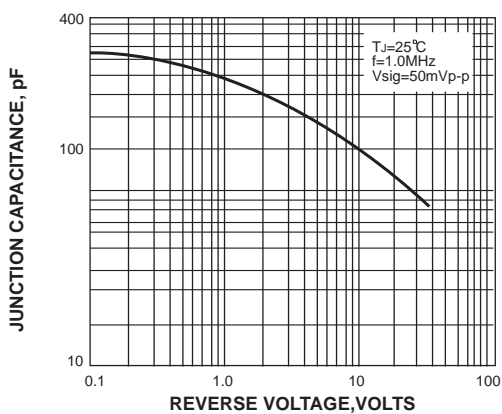


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

