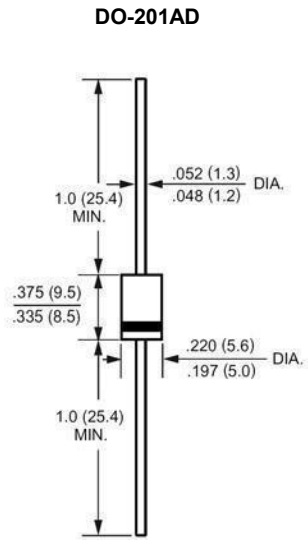


REVERSE VOLTAGE: 20 to 40VOLTS
FORWARD CURRENT: 3.0 AMPERE



Dimensions in inches and (millimeters)

FEATURES

- High current capability
- High surge current capability
- Low forward voltage drop
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters free wheeling, and porlarity protection applications

MECHANICAL DATA

Case: Molded plastic, DO-201AD

Epoxy: UL 94V-O rate flame retardant

Lead: Axial leads, solderable perMIL-STD-202, method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any

Weight: 0.04ounce, 1.1gram

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbol	1N5820	1N5821	1N5822	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length	I _(AV)	3.0			Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	80			Amp
Maximum Forward Voltage at 3.0A DC and 25°C	V _F	0.475	0.500	0.525	Volts
Maximum Reverse Current at T _A =25°C at Rated DC Blocking Voltage T _A =100°C	I _R	0.5			mAmp
Typical Junction Capacitance (Note 1)	C _J	250			pF
Typical Thermal Resistance (Note 2)	R _{θJA}	40			°C/W
Operating Junction Temperature Range	T _J	-55 to +125			°C
Storage Temperature Range	T _{stg}	-55 to +150			°C

NOTES:

1 Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2 Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

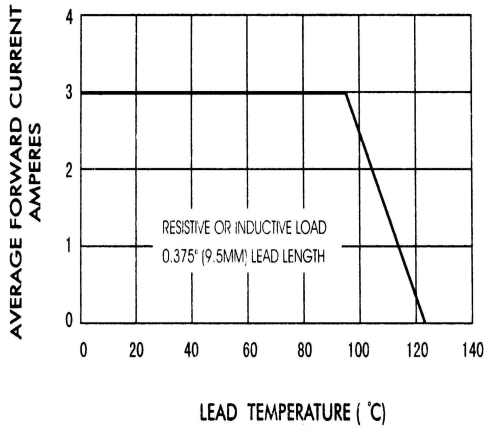


FIG.2-TYPICAL FORWARD CHARACTERISTICS

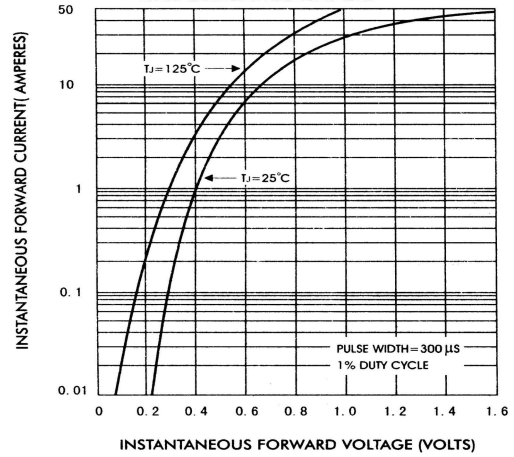


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

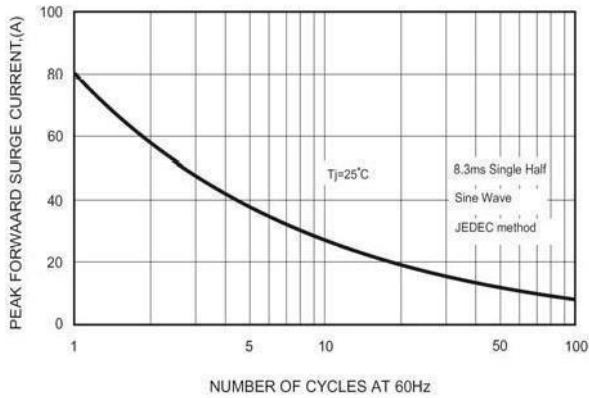


FIG.4-TYPICAL JUNCTION CAPACITANCE

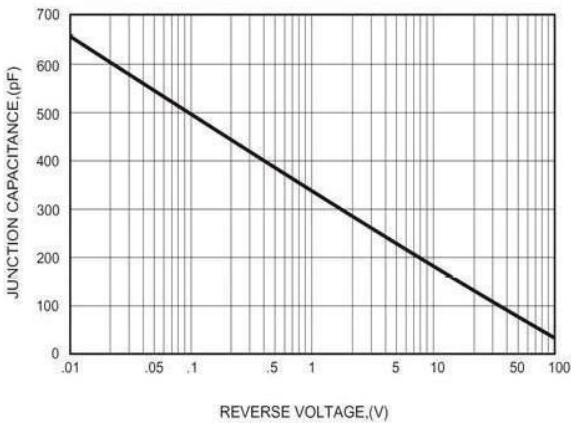


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

