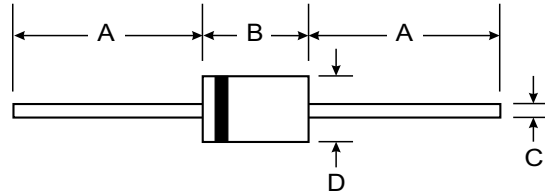


Features

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol, Isopropanol and similar solvents



Mechanical Data

- Case: JEDEC DO-201AD, molded plastic
- Terminals: Axial lead, solderable per MIL-STD202, method 208
- Polarity: Color band denotes cathode
- Weight: 0.041 ounces, 1.15 grams
- Mounting position: Any

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_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

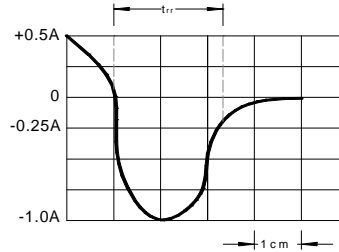
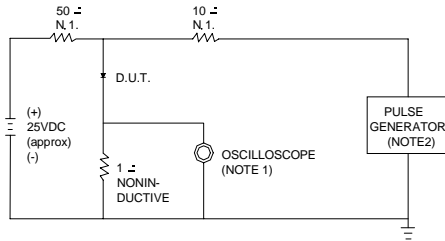
		31DF1	31DF2	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	100	200	V
Maximum RMS voltage	V _{RMS}	70	140	V
Maximum DC blocking voltage	V _{DC}	100	200	V
Maximum average forward rectified current 9.5mm lead length, @T _A =75 °C	I _{F(AV)}	3.0		A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @T _J =125 °C	I _{FSM}	125.0		A
Maximum instantaneous forward voltage @ I _F =1.6A	V _F	0.98		V
Maximum reverse current @T _A =25 °C at rated DC blocking voltage @T _A =100 °C	I _R	5.0	50.0	μA
Maximum reverse recovery time (Note1)	t _{rr}	30		ns
Typical junction capacitance (Note2)	C _J	90		pF
Typical thermal resistance (Note3)	R _{θJA}	34		°C/W
Operating junction temperature range	T _J	- 55 ----- + 150		°C
Storage temperature range	T _{STG}	- 55 ----- + 150		°C

NOTE: 1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.

FIG.1 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. RISE TIME = 7ns MAX INPUT IMPEDANCE = 1M Ω , 22pF.
2. RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50 Ω .

SET TIME BASE FOR 10 ns/cm

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

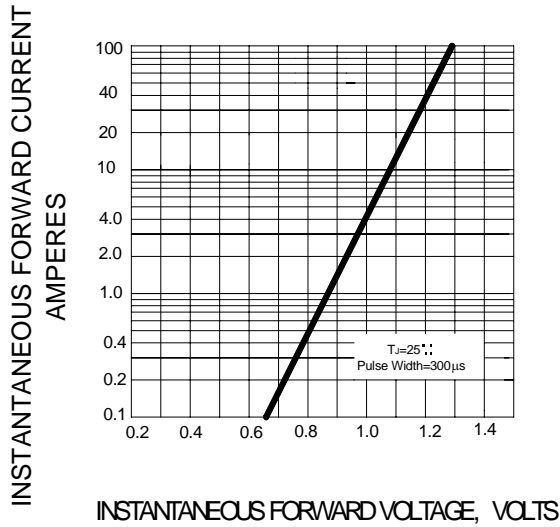


FIG.3 – FORWARD DERATING CURVE

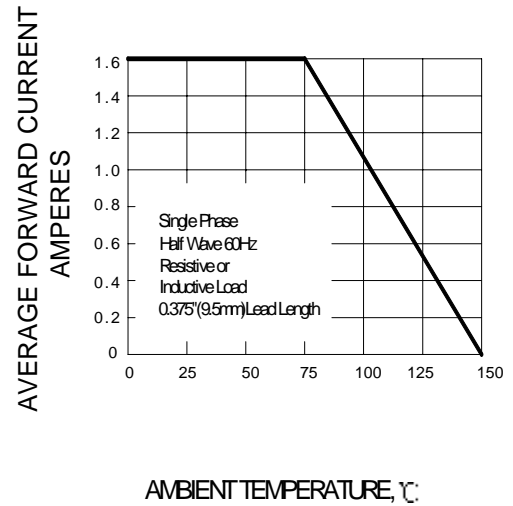


FIG.4- TYPICAL JUNCTION CAPACITANCE

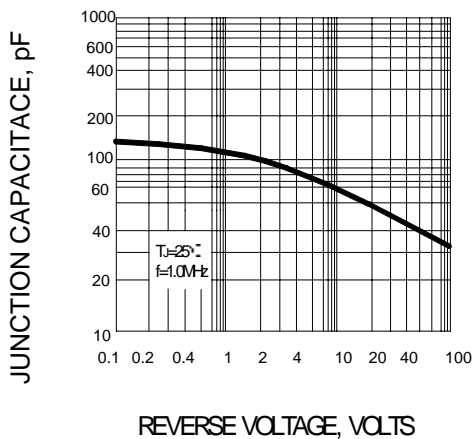


FIG.5- PEAK FORWARD SURGE CURRENT

