



FEATURES

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Chlorothene and similar solvents
- The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

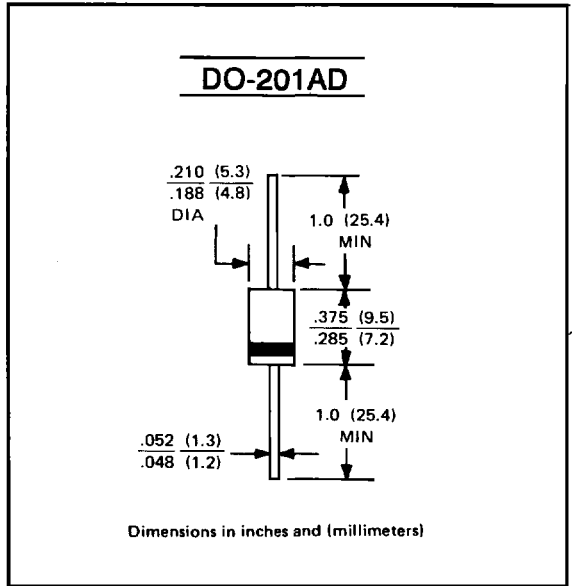
Case: JEDEC DO-201 AD molded plastic

Terminals: Plated axial leads, solderable per MIL-STD-202, Method 208

Polarity: Color band denotes cathode

Weight: 0.04 ounce, 1.1 grams

Mounting position: Any



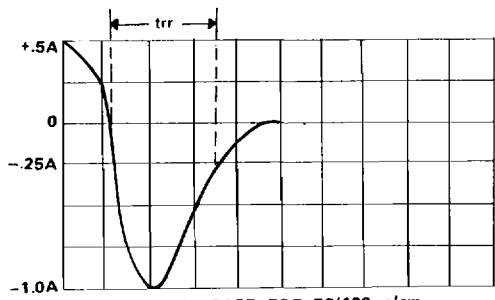
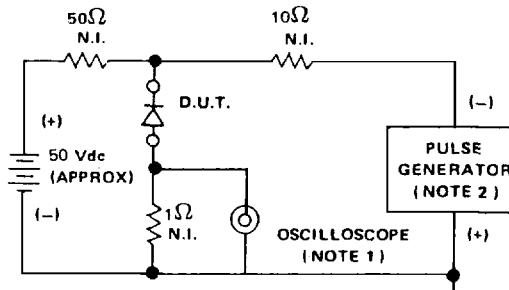
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%.

		JR3001	SR3002	SR3003	SR3004	SR3005	SR3006	SR3007	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Lengths @ T _A = 50° C	I _(AV)	3.0							A
Peak Forward Surge Current 8.3 ms single half-sine-wave superimposed on rated load	I _{FSM}	150							A
Maximum Forward Voltage at 3.0A DC	V _F	1.2							V
Maximum DC Reverse Current @ T _A = 25° C at Rated DC Blocking Voltage @ T _A = 100° C	I _R	10							uA
		150	200	250	300			uA	
Maximum Reverse Recovery Time (Note 1)	t _{RR}	150			200		300		ns
Typical Junction Capacitance (Note 2)	C _J	50			25				pF
Typical Thermal Resistance (Note 3)	R _{θJA}	28							°C/W
Operating Temperature Range	T _J	-65 to +150							°C
Storage Temperature Range	T _{STG}	-65 to +175							°C

NOTES: 1. Measured with I_F = 0.5A, I_R = 1 A, I_{rr} = 0.25A
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC
 3. Thermal Resistance Junction to Ambient.

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



NOTES:

1. RISE TIME = 7n SEC MAX, INPUT IMPEDANCE = 1 MEGOHM, 22pF.
2. RISE TIME = 10n SEC MAX, SOURCE IMPEDANCE = 50 OHM,

FIG. 2 — FORWARD DERATING CURVE

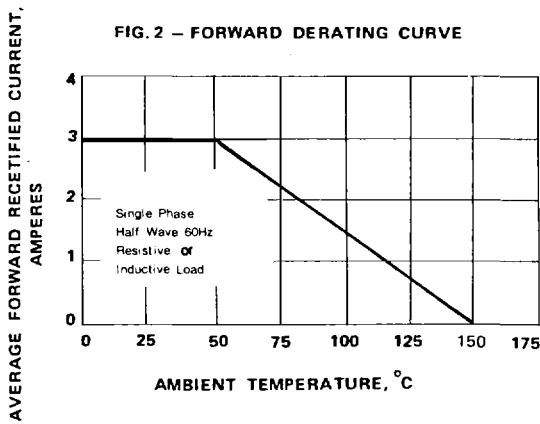


FIG. 3— PEAK FORWARD SURGE CURRENT

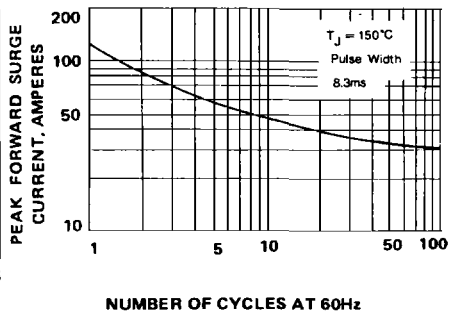


FIG. 4. TYPICAL REVERSE CHARACTERISTIC

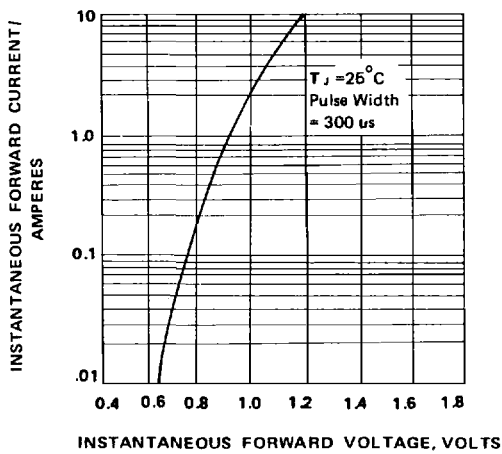


FIG. 5— TYPICAL JUNCTION CAPACITANCE

