

General Purpose Rectifier



1N5400-G thru 1N5408-G (RoHS Device)

Voltage: 50 ~ 1000 Volts

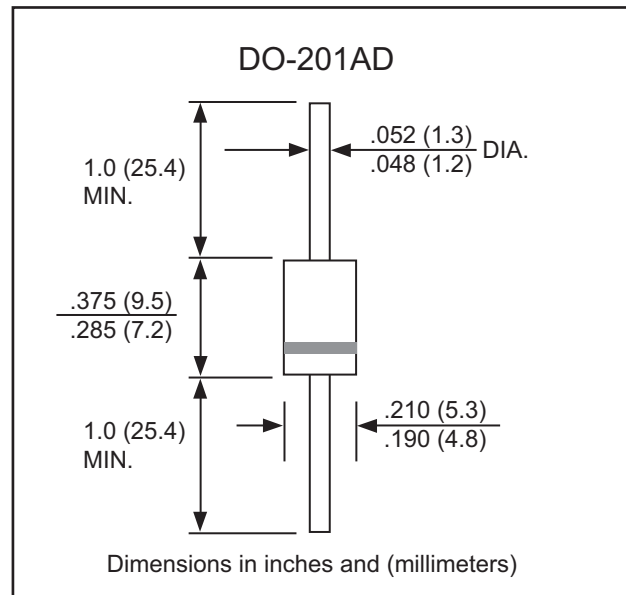
Current: 3.0 Amp

Features:

- Low forward voltage drop
- High current capability
- Low reverse leakage current
- High surge current capability

Mechanical Data:

- Case: Molded plastic DO-201AD
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Solderable per MIL-STD-202 method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 1.1gram



Maximum Ratings and Electrical Characteristics

Rating at 25°C unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate currently by 20%.

Characteristics	Symbol	1N 5400-G	1N 5401-G	1N 5402-G	1N 5404-G	1N 5406-G	1N 5407-G	1N 5408-G	UNIT
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
Max. Average Forward Rectified Current @ $T_L = 75^\circ\text{C}$	$I_{(AV)}$	3.0							A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Max. Instantaneous Forward Voltage @ 3.0A	V_F	0.95							V
Max. DC Reverse Current @ $T_J = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J = 100^\circ\text{C}$	I_R	5.0 250							μA μA
Typical Junction Capacitance (Note1)	C_J	40							pF
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	15							$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +125							$^\circ\text{C}$

Note: (1) Thermal resistance junction to lead.
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

"-G" suffix designated RoHS compliant version

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FIG.1 - FORWARD CURRENT DERATING CURVE

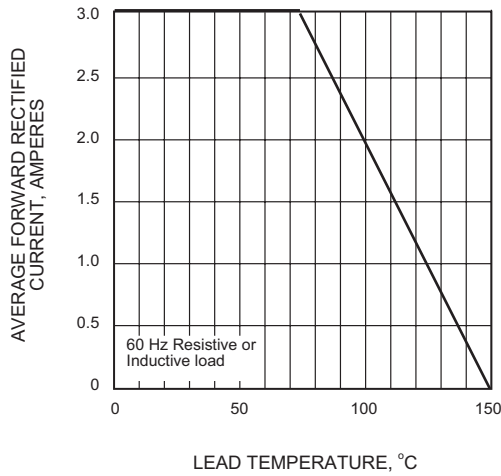


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

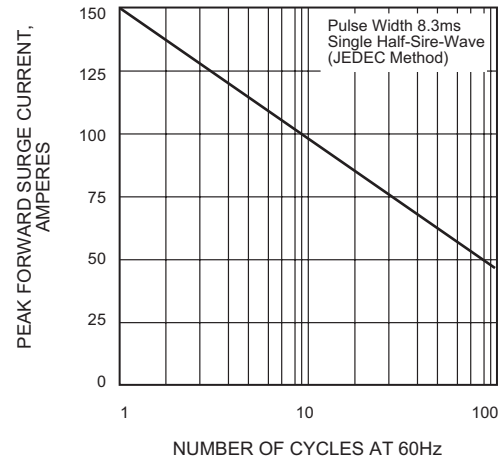


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

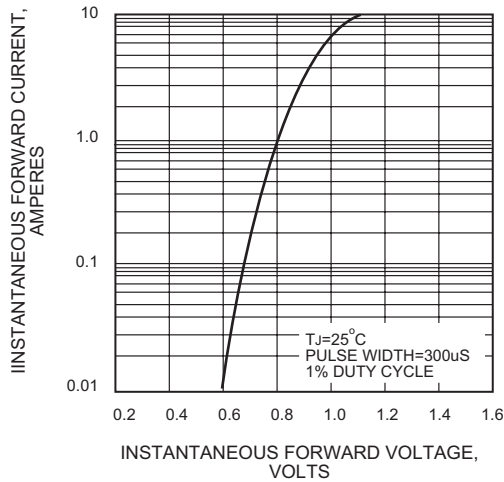


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

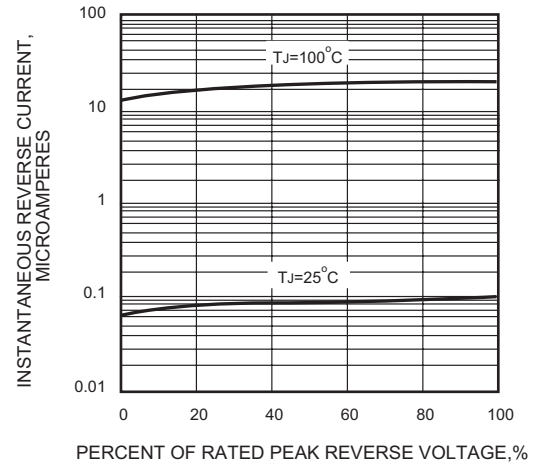


FIG.5 - TYPICAL JUNCTION CAPACITANCE

