1N5400 THRU 1N5408

GENERAL PURPOSE PLASTIC SILICON RECTIFIER

REVERSE VOLTAGE: FORWARD CURRENT:

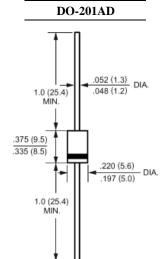
50 to 1000 VOLTS 3.0 AMPERES

FEATURES

High current capability
Plastic package has Underwriters Laboratory Flammability Classification 94V-O ctilizing

Flame Retardant Epoxy Molding Compound.

- \cdot Exceeds environmental standards of MIL-S-19500/228
- · Low leakage.



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MECHANICAL DATA

Case: Molded plastic, DO-201AD Terminals: Plated axial leads, solderable per MIL-STD-202, method 208 guaranteed Polarity: Color band denotes cathode end Mounting position: Any Weight: 0.04ounce, 1.1gram

Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25 $^\circ\!\mathrm{C}$ ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols	1N5400	1N5401	1N5402	1N5403	1N5404	1N5405	1N5406	1N5407	1N5408	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	350	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	500	600	800	1000	Volts
Maximum Average Forward Rectified Current	т	3.0									Amp
.375''(9.5mm) Lead Length at T _A =75°C	I _(AV)										
Peak Forward Surge Current,											
8.3ms single half-sine-wave	I _{FSM} 200								Amp		
superimposed on rated load (JEDEC method)											
Maximum Forward Voltage	V _F	1.1									Volts
at 3.0A DC and 25°C	۰F										
Maximum Reverse Current at T _A =25°C	I _R	5.0									uAmp
at Rated DC Blocking Voltage T _A =100 °C	IR	50									
Typical Junction Capacitance (Note 1)	CJ	40									pF
Typical Thermal Resistance (Note 2)	R _{0JA}	30									°C/W
Operating Junction Temperature Range	TJ	-55 to +150									C
Storage Temperature Range	Tstg	-55 to +150									C

NOTES:

1- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375" (9.5mm) lead length P.C.B. Mounted with 0.8x0.8" (20x20mm) copper pads.

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RATINGS AND CHARACTERISTIC CURVES

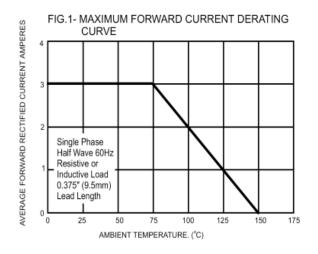


FIG.3- TYPICAL FORWARD CHARACTERISTICS

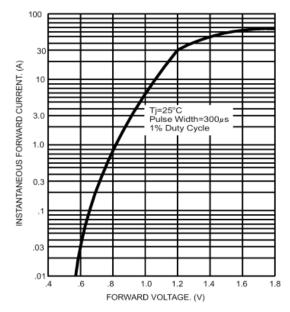


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT 200 E PEAK FORWARD SURGE CURRENT. 100 NON-REPETITIVE Т 50 Tj=25°C 8.3ms Single Half REPETITIVE Sine Wave JEDEC Method 10 10 50 100 NUMBER OF CYCLES AT 60Hz

FIG.4- TYPICAL JUNCTION CAPACITANCE

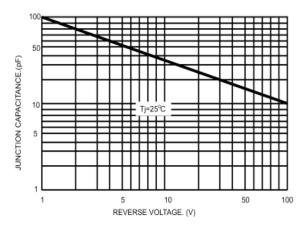
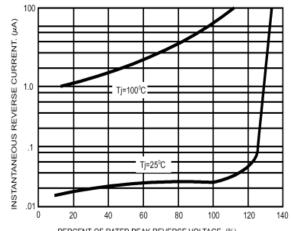


FIG.5- TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE. (%)

