

1N5400 - 1N5408

3.0 AMPS. Silicon Rectifiers

DO-201AD

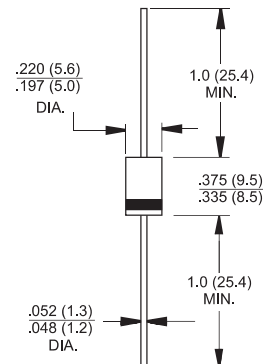


Features

- ✧ High efficiency, Low VF
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ Low power loss
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Lead: Pure tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375" (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 1.2 grams



Dimensions in inches and (millimeters)



Marking Diagram

1N540X = Specific Device Code
G = Green Compound
Y = Year
WW = Work Week

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbol	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ TA = 75 °C	IF(AV)	3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	200							A
Rating for Fusing (t<8.3ms)	I ² t	166							A ² S
Maximum Instantaneous Forward Voltage @ 3.0A	VF	1.0							V
Maximum DC Reverse Current at @ TA=25 °C Rated DC Blocking Voltage (Note 1) @ TA=125 °C	IR	5.0 100							uA uA
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @ Tj=75 °C	IR(AV)	30							uA
Typical Junction Capacitance (Note 3)	Cj	50							pF
Typical Thermal Resistance (Note 2)	RθJA	40							°C/W
Operating Temperature Range	TJ	-65 to +150							°C
Storage Temperature Range	TSTG	-65 to +150							°C

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
2. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.
3. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

RATINGS AND CHARACTERISTIC CURVES (1N5400 THRU 1N5408)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

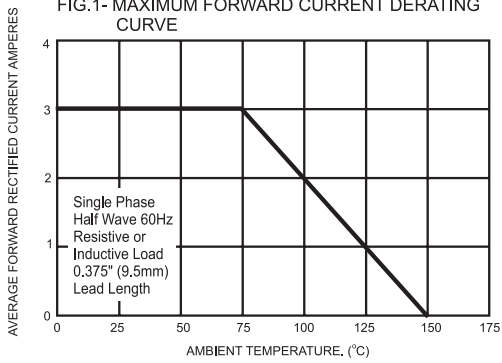


FIG.2- TYPICAL REVERSE CHARACTERISTICS

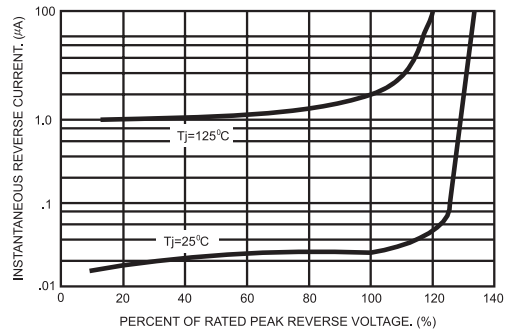


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

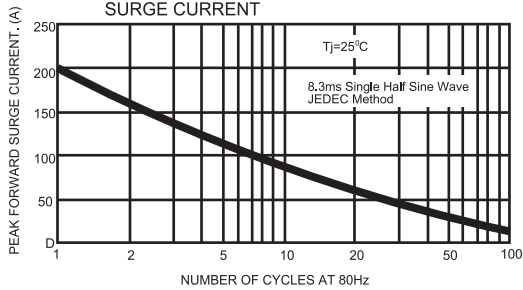


FIG.5- TYPICAL FORWARD CHARACTERISTICS

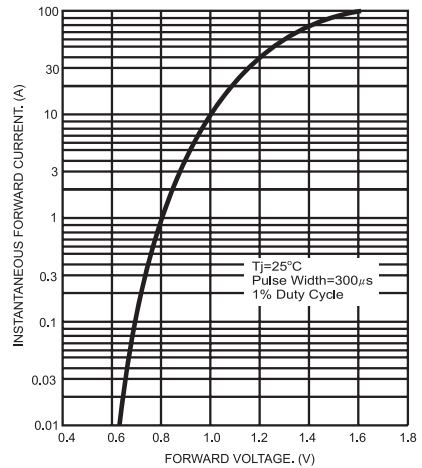


FIG.4- TYPICAL JUNCTION CAPACITANCE

