

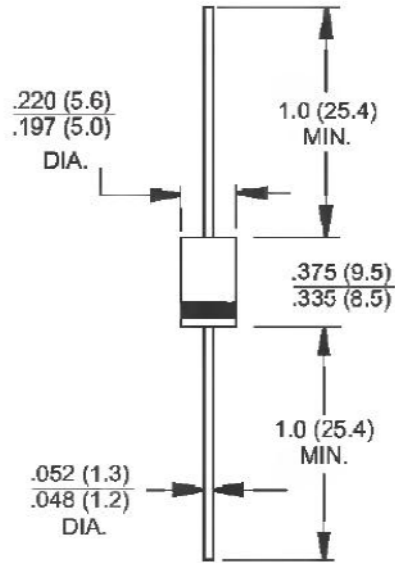


**Features**

- ✧ 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**

- ✧ Case: 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/10s / .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	1N 5400	1N 5401	1N 5402	1N 5404	1N 5406	1N 5407	1N 5408	Unit
Maximum Repetitive 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 Length @ $T_A=75^{\circ}C$	$I_{F(AV)}$	3							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	200							A
Rating for Fusing (t<8.3ms)	$I^2T$	166							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage (Note 1) @ 3 A	$V_F$	1.0							V
Maximum Reverse Current @ Rated VR $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	$I_R$	5 100							uA
Typical Junction Capacitance (Note 2)	$C_j$	50							pF
Typical Thermal Resistance	$R_{\theta JA}$	40							°C/W
Operating Temperature Range	$T_J$	- 65 to + 150							°C
Storage Temperature Range	$T_{STG}$	- 65 to + 150							°C

Note1: Pulse Test with PW=300 usec, 1% Duty Cycle

Note2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

## RATINGS AND CHARACTERISTIC CURVES (1N5400 - 1N5408)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

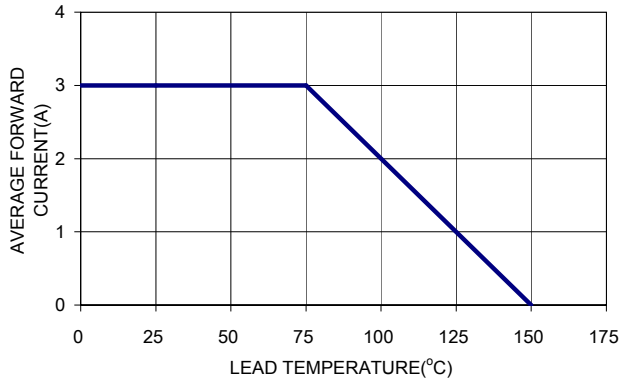


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

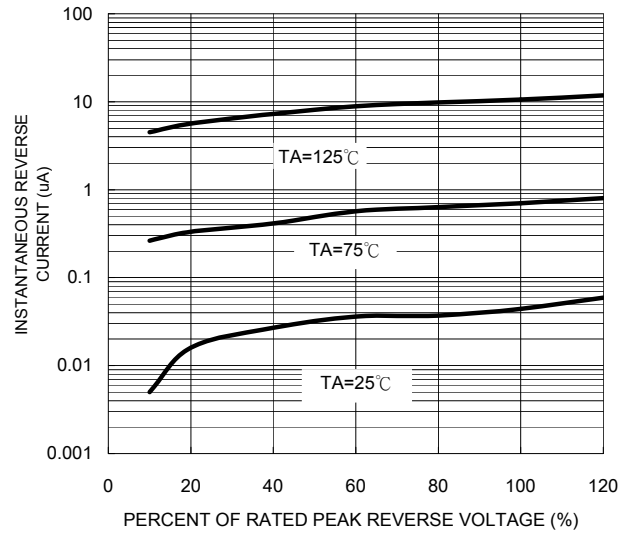


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

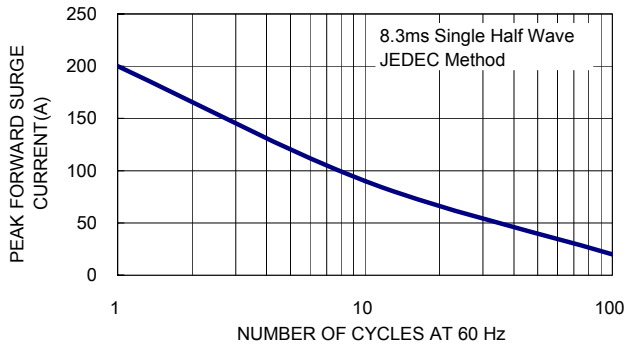


Fig. 5 TYPICAL FORWARD CHARACTERISTICS

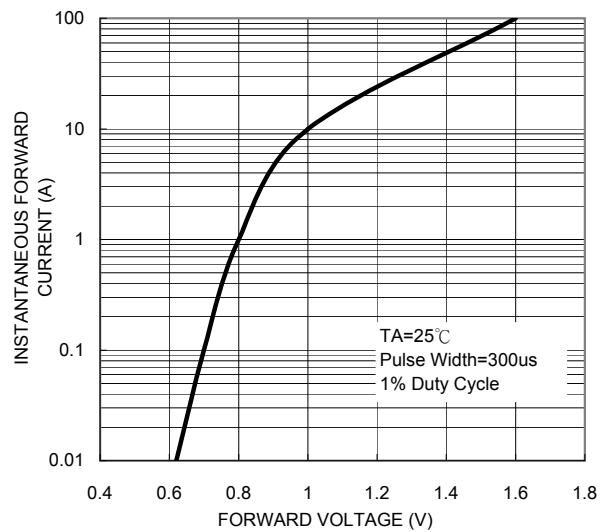


FIG. 4 TYPICAL JUNCTION CAPACITANCE

