# SAMYANG ELECTRONICS

**1N5400G --- 1N5408G**

## GLASS PASSIVATED RECTIERS

**VOLTAGE RANGE: 50 --- 1000 V**
**CURRENT: 3.0 A**

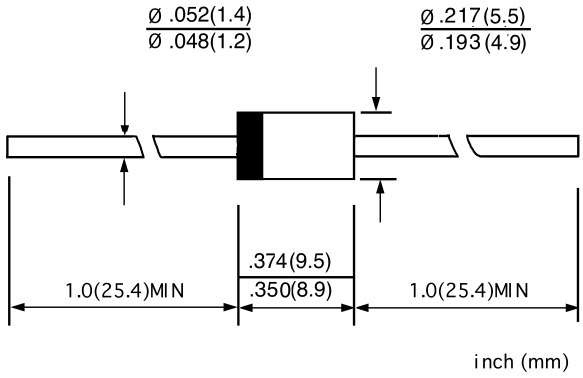
### FEATURES

- ◇The plastic package carries underwrites laboratory flammability classification 94V-O
- ◇High current capability
- ◇Low reverse leakage
- ◇Glass passivated junction
- ◇Low forward voltage drop
- ◇High temperature soldering guaranteed: 350℃/10 seconds, 0.375"(9.5mm) lead length, 5lbs, (2.3kg) tension

### MECHANICAL DATA

- ◇Case:JEDEC DO--27,molded plastic
- ◇Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- ◇Polarity: Color band denotes cathode
- ◇Weight: 0.041 ounces,1.15 grams
- ◇Mounting position: Any

**DO - 27**




### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

| | | 1N 5400G | 1N 5401G | 1N 5402G | 1N 5403G | 1N 5404G | 1N 5405G | 1N 5406G | 1N 5407G | 1N 5408G | UNITS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum recurrent peak reverse voltage | $V_{RRM}$ | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | $V_{RMS}$ | 35 | 70 | 140 | 210 | 280 | 350 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | $V_{DC}$ | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current 9.5mm lead length, @$T_A$= 75℃ | $I_{F(AV)}$ | 3.0 | | | | | | | | | A |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @$T_J$=125℃ | $I_{FSM}$ | 200.0 | | | | | | | | | A |
| Maximum instantaneous forward voltage at 3.0 A | $V_F$ | 1.1 | | | | | | | | | V |
| Maximum reverse current @$T_A$=25℃ | $I_R$ | 10.0 | | | | | | | | | μA |
| at rated DC blocking voltage @$T_A$=100℃ | | 100.0 | | | | | | | | | |
| Typical junction capacitance (Note1) | $C_J$ | 35.0 | | | | | | | | | pF |
| Typical thermal Resistance (Note2) | $R_{JA}$ | 20.0 | | | | | | | | | ℃/W |
| Operating junction temperature range | $T_J$ | - 55 ---- + 175 | | | | | | | | | ℃ |
| Storage temperature range | $T_{STG}$ | - 55 ---- + 175 | | | | | | | | | ℃ |

NOTE: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Thermal Resistance Junction Ambient.

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**FIG.1 –FORWARD CURRENT DERATING CURVE**

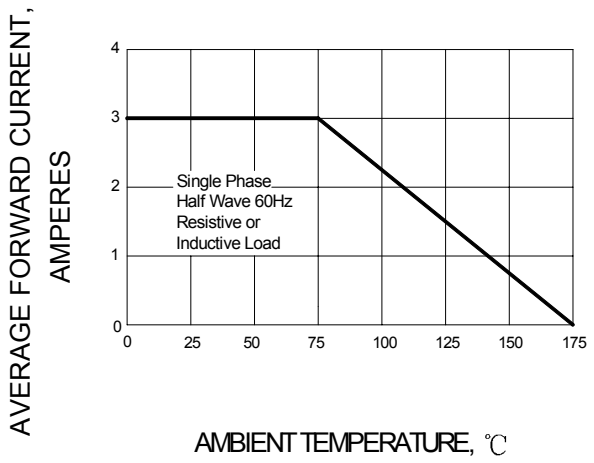



**FIG.2–TYPICAL FORWARD CHARACTERISTIC**

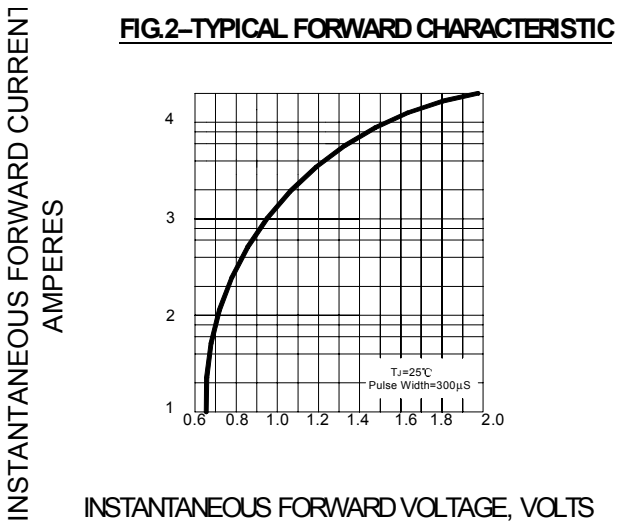



**FIG.3 – PEAK FORWARD SURGE CURRENT**

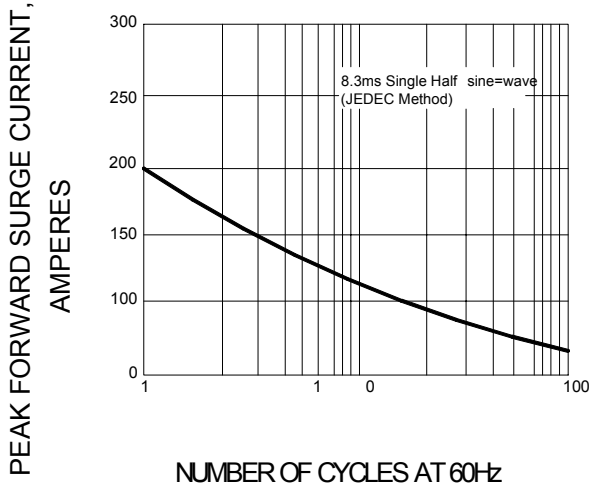



**FIG.4 – TYPICAL JUNCTION CAPACITANCE**

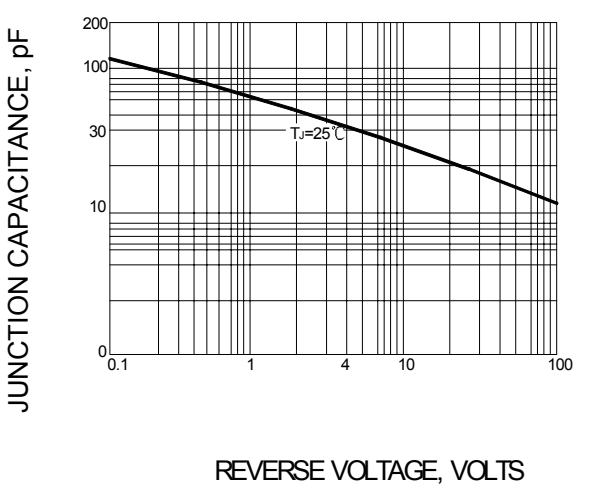



**FIG.5 – TYPICAL REVERSE CHARCTERISTICS**

