

1N5406G-1N5408G(LS)

GLASS PASSIVATED RECTIFIER

**REVERSE VOLTAGE – 600 to 1000 Volts
FORWARD CURRENT – 3.0 Amperes**

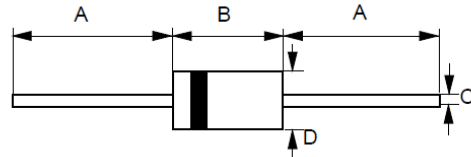
FEATURES

- Glass passivated chip
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

MECHANICAL DATA

- Case : JEDEC DO-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.04 ounces, 1.1 grams
- Mounting position : Any

DO-201AD



| DO-201AD | | |
|------------------------------|------|------|
| Dim | Min. | Max. |
| A | 25.4 | -- |
| B | 7.30 | 9.50 |
| C | 1.20 | 1.30 |
| D | 4.80 | 5.30 |
| All Dimensions in millimeter | | |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

| PARAMETER | SYMBOL | 1N5406G | 1N5407G | 1N5408G | UNIT |
|---|--|---------------|---------|---------|---------------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current | @ $T_A=55^\circ\text{C}$ $I_{(AV)}$ | 3.0 | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD) | I_{FSM} | 125 | | | A |
| I^2t Rating for fusing ($3\text{ms} \leq t \leq 8.3\text{ms}$) | I^2t | 65 | | | A^2S |
| Maximum forward Voltage at 3.0A DC | V_F | 1.1 | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | @ $T_J=25^\circ\text{C}$ @ $T_J=125^\circ\text{C}$ I_R | 5 100 | | | μA |
| Typical Junction Capacitance (Note 4) | C_T | 40 | | | pF |
| Typical Thermal Resistance (Note 5) | R_{thJA} R_{thJL} R_{thJC} | 22 10 6 | | | $^\circ\text{C}/\text{W}$ |
| Operating and storage temperature range | T_J, T_{STG} | -55 to +150 | | | $^\circ\text{C}$ |

Note :

REV-10, Oct-2021, KDDF01

1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
5. Thermal Resistance Junction to Ambient, Lead and Case.

RATING AND CHARACTERISTIC CURVES

1N5406G-1N5408G

FIG.1- FORWARD CURRENT DERATING CURVE

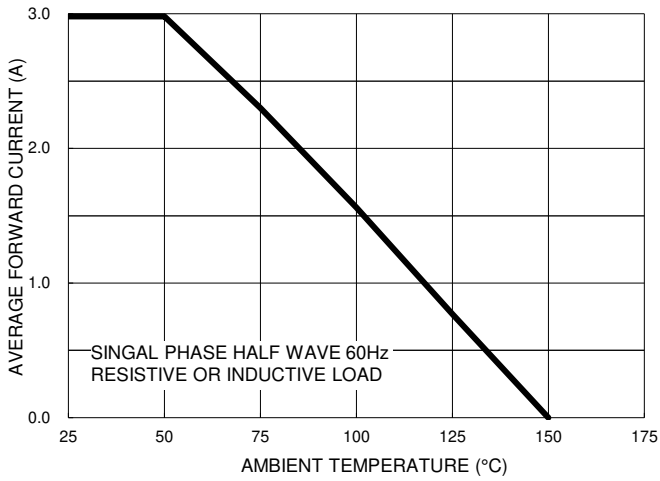


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

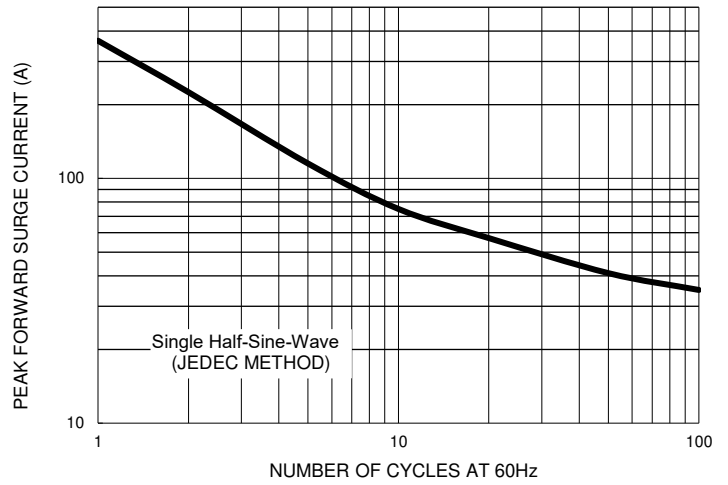


FIG.3- TYPICAL JUNCTION CAPACITANCE

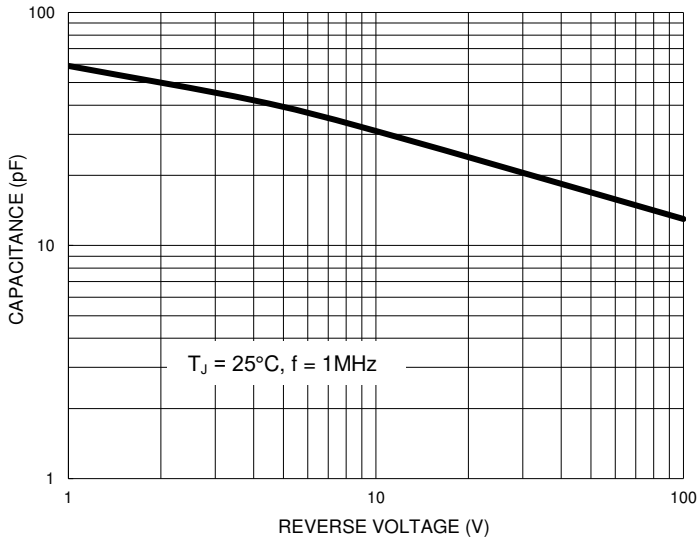


FIG.4- TYPICAL FORWARD CHARACTERISTICS

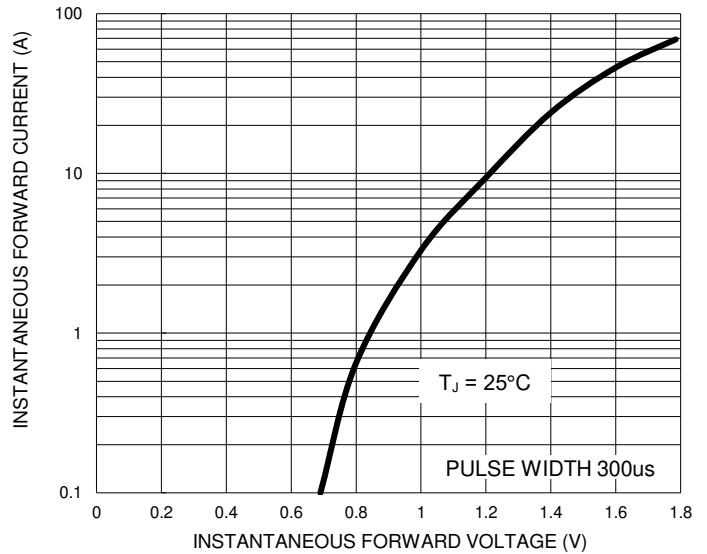
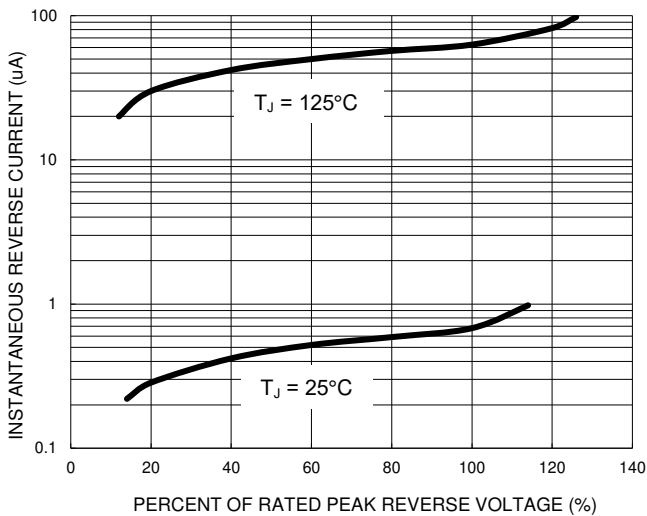


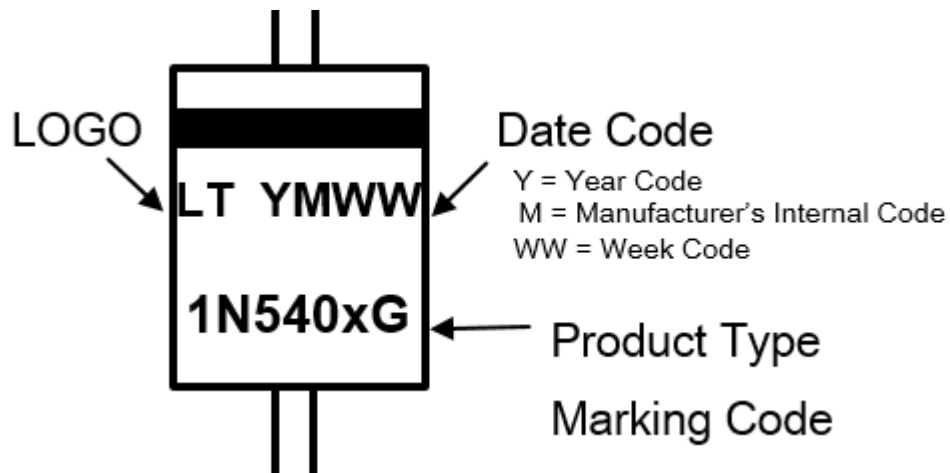
FIG.5- TYPICAL REVERSE CHARACTERISTICS



Ordering Information :

| Part Number | Case | Packaging |
|-------------|----------|--------------|
| 1N5406G_HF | DO-201AD | 1200pcs/Reel |
| 1N5407G_HF | DO-201AD | 1200pcs/Reel |
| 1N5408G_HF | DO-201AD | 1200pcs/Reel |

Marking Information :



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