

## G110DL THRU G110ML

### Low VF Rectifier Diode

#### ● FEATURES

- \* Compliance to RoHS product
- \* GPRC (Glass passivated rectifier chip) inside
- \* Glass passivated cavity-free junction
- \* Low forward voltage drop
- \* High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3 kg) tension
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

#### ● APPLICATION

- \* General purpose rectification
- \* Surge absorption

#### ● MECHANICAL DATA

**Case :** R-1 molded plastic

**Terminals :** Tin Plated, solderable per MIL-STD-750, Method 2026.

**Polarity :** Color band denotes cathode end

**Weight :** 0.181 gram

#### ● PACKING

**Bulk :**

- \* 1,000 pieces box
- \* 50 boxes per (465x215x265mm) carton

**Reel :**

- \* 5,000 pieces per reel
- \* 4 reels per (340x340x330mm) carton

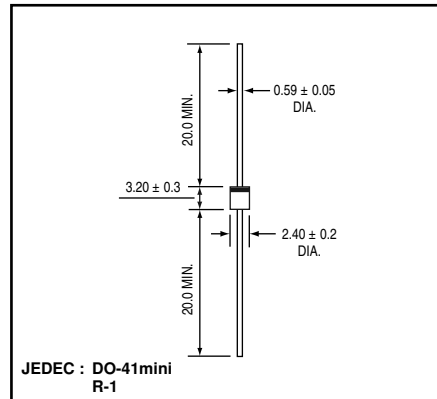
**VF < 0.90V @IF = 1A**

**IFSM = 30Amp**

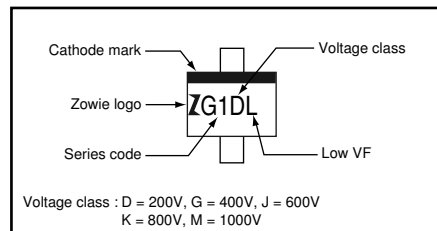
#### ● OUTLINE DIMENSIONS

**Case : R-1**

Unit : mm



#### ● MARKING



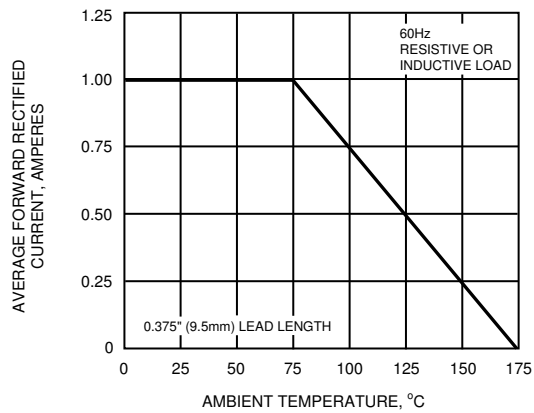
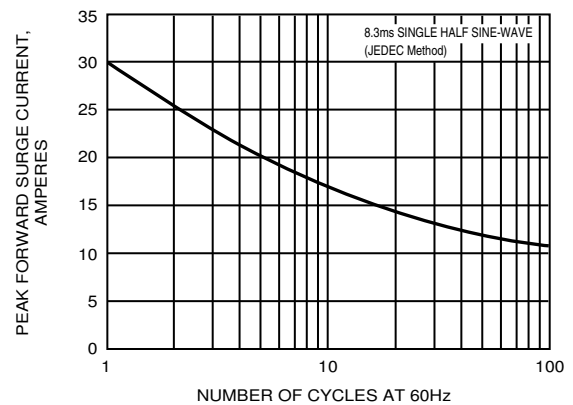
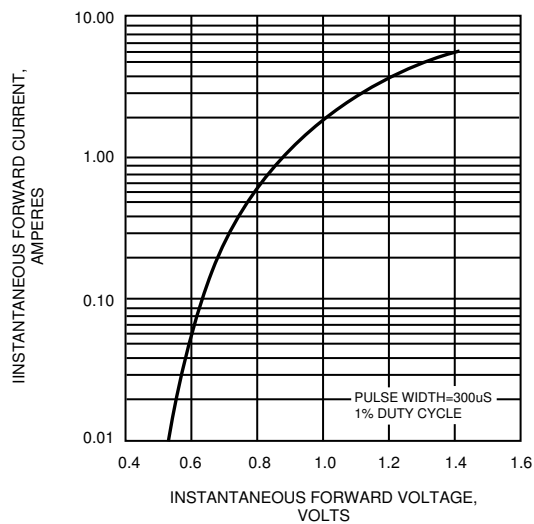
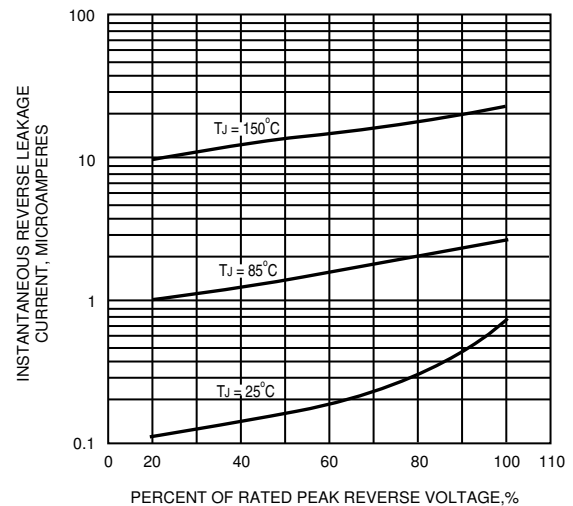
#### Absolute Maximum Ratings (Ta = 25 °C)

| ITEM                                 | Symbol | Ratings     |        |        |        |        | Unit |
|--------------------------------------|--------|-------------|--------|--------|--------|--------|------|
|                                      |        | G110DL      | G110GL | G110JL | G110KL | G110ML |      |
| Repetitive peak reverse voltage      | VRRM   | 200         | 400    | 600    | 800    | 1000   | V    |
| Average forward current              | IF(AV) | 1.0         |        |        |        |        | A    |
| Peak forward surge current *         | IFSM   | 30          |        |        |        |        |      |
| Operating junction temperature Range | Tj     | -65 to +175 |        |        |        |        | °C   |
| Storage temperature Range            | TSTG   | -65 to +175 |        |        |        |        |      |

#### Electrical characteristics (Ta = 25 °C)

| ITEM                            | Symbol  | Conditions                 | Type   | Min. | Typ. | Max. | Unit |
|---------------------------------|---------|----------------------------|--------|------|------|------|------|
| Forward voltage                 | VF      | IF = 1.0A                  | G110DL |      |      |      | V    |
|                                 |         |                            | G110GL | -    | 0.87 | 0.90 |      |
|                                 |         |                            | G110JL |      |      |      |      |
|                                 |         |                            | G110KL | -    | 0.90 | 0.92 |      |
|                                 |         |                            | G110ML |      |      |      |      |
| Repetitive peak reverse current | IRRM    | VR = Max. VRRM, Ta = 25 °C |        | -    | 0.08 | 5    | uA   |
| Junction capacitance            | Cj      | VR = 4V, f = 1.0 MHz       |        | -    | 15   | -    | pF   |
| Thermal resistance              | Rth(JA) | Junction to ambient        |        | -    | 50   | -    | °C/W |
|                                 | Rth(JL) | Junction to lead           |        | -    | 20   | -    |      |

\* 8.3ms single half sine-wave

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

**FIG.2 - MAXIMUM NON-REPETITIVE  
PEAK FORWARD SURGE CURRENT**

**FIG.3 - TYPICAL INSTANTANEOUS  
FORWARD CHARACTERISTICS**

**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

**FIG.5 - TYPICAL JUNCTION CAPACITANCE**
