

62040 **1N6609** **JAN AND JANTX QUALIFIED,**
1N6610 **HI-BRITE HERMETIC**
1N6611 **LED INDICATORS**



04/27/2012

Features:

- Hermetically sealed
- Choice of colors (Red, Yellow, Green)
- Designed for Hi-Reliability applications
- High Brite Glass Lens
- DLA qualified

Applications:

- P.C. Board Fault Indicator
- Logic Status Indicator
- Binary Data Display
- Power supply on/off indicator

DESCRIPTION

The **1N6609**, **1N6610** and **1N6611** series indicators are hermetically sealed in TO-46 packages with a clear glass lens which provides improved viewability in bright sunlight. The 1N6609 (red) and 1N6610 (yellow) indicators utilize a high efficiency GaAsP on GaP LED, while the 1N6611 (green) indicator utilizes a GaP on GaP LED. All versions are available in commercial, JAN or JANTX screened levels.

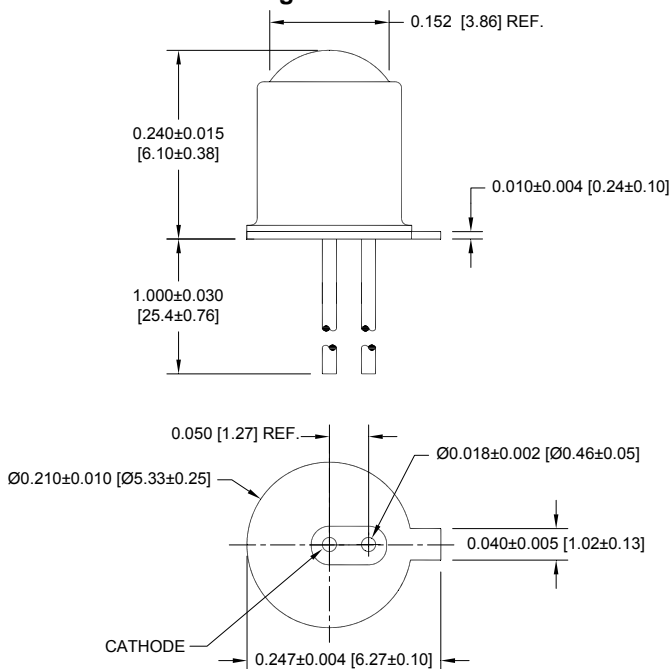
ABSOLUTE MAXIMUM RATINGS

| | |
|--|-----------------|
| Reverse Voltage | 5 Vdc |
| Power Dissipation (Note 1) | 120 mW |
| Forward Current-Continuous | 35 mA |
| Storage Temperature | -65°C to +100°C |
| Operating Temperature | -55°C to +100°C |
| Lead Soldering Temperature (10 seconds, 1/16" from case) | 260°C |
| Maximum Mounting Torque (Panel mount version) | 25in•lbs |

Notes:

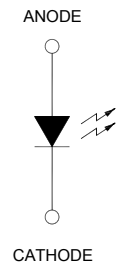
1. Derate at the rate of 1.6 mW/°C above 50°C.

Package Dimensions



ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]

Schematic Diagram



62040 1N6609
1N6610
1N6611

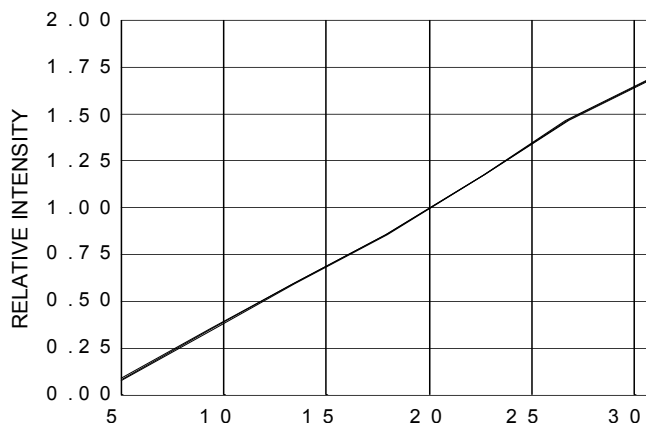
JAN AND JANTX QUALIFIED, HI-BRITE HERMETIC LED INDICATORS

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ELECTRICAL CHARACTERISTICS $T_A=25^\circ\text{C}$

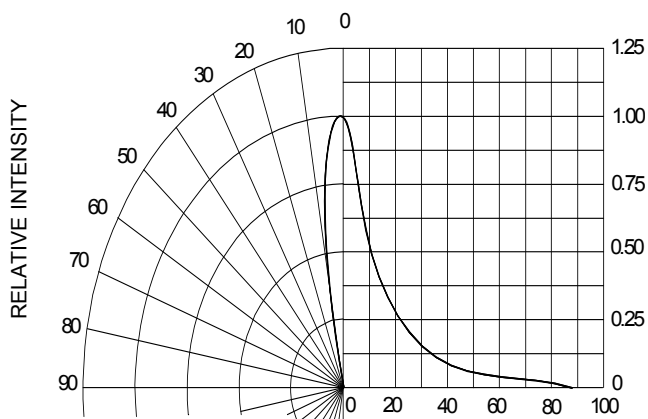
| PART NUMBER | COLOR | TEST CONDITION | PARAMETER LIMITS | | | |
|-------------|--------|----------------|------------------|------------------------|----------------------------------|---------------|
| | | | I_F mA | PEAK λ TYP. | $I_{V1\theta = 0^\circ}$ MIN. | V_F MAX. |
| 62040-10X | RED | 20 | 635 | 20 mcd | 3V | 100pF |
| 62040-20X | YELLOW | 20 | 585 | 20 mcd | 3V | 100pF |
| 62040-30X | GREEN | 20 | 570 | 20 mcd | 3V | 100pF |

Relative Luminous Intensity
vs.
Forward Current
(Normalized at 20 mA)



I_F - Forward Current - mA

Relative Luminous Intensity
vs.
Angular Displacement



Angular Displacement

RECOMMENDED OPERATING CONDITIONS:

| PARAMETER | SYMBOL | MIN | MAX | UNITS |
|-----------------------|--------|-----|------|------------------|
| Forward Current | I_F | 20 | 35 | mA |
| Operating Temperature | T_A | -55 | +100 | $^\circ\text{C}$ |

SELECTION GUIDE

| PART NUMBER | PART DESCRIPTION | CONTROLLING MIL DOCUMENT |
|-------------|-----------------------------------|--------------------------|
| 62040-101 | Commercial, Red LED, TO-46 | 1N6609 |
| 62040-102 | JAN Screened, Red LED, TO-46 | JAN1N6609 |
| 62040-103 | JANTX Screened, Red LED, TO-46 | JANTX1N6609 |
| 62040-201 | Commercial, Yellow LED, TO-46 | 1N6610 |
| 62040-202 | JAN Screened, Yellow LED, TO-46 | JAN1N6610 |
| 62040-203 | JANTX Screened, Yellow LED, TO-46 | JANTX1N6610 |
| 62040-301 | Commercial, Green LED, TO-46 | 1N6611 |
| 62040-302 | JAN Screened, Green LED, TO-46 | JAN1N6611 |
| 62040-303 | JANTX Screened, Green LED, TO-46 | JANTX1N6611 |