

**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.

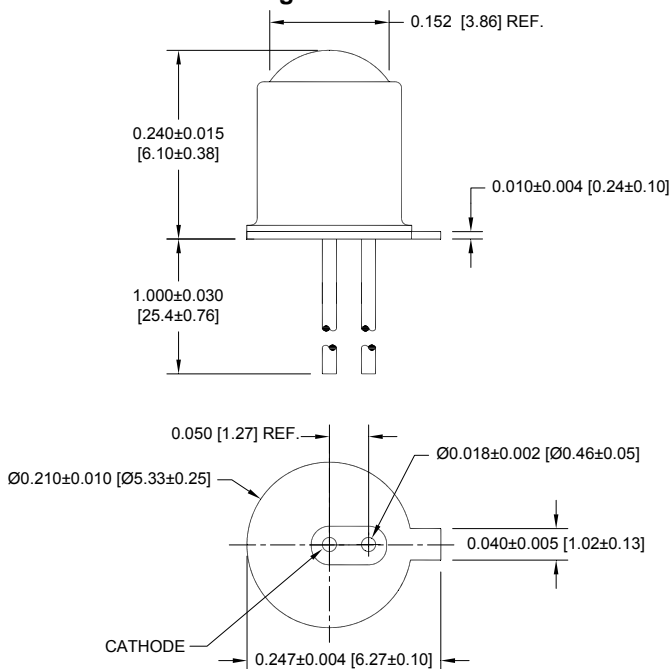
**ABSOLUTE MAXIMUM RATINGS**

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:

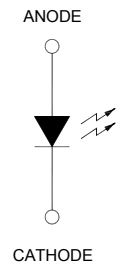
1. Derate at the rate of 1.6 mW/°C above 50°C.

**Package Dimensions**



ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]

**Schematic Diagram**



**62040 1N6609**  
**1N6610**  
**1N6611**

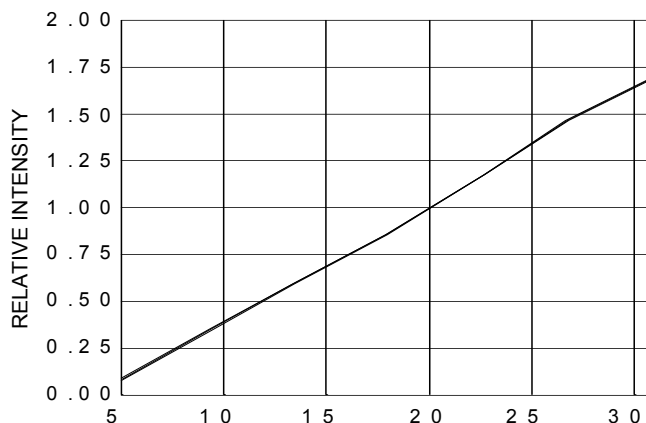
JAN AND JANTX QUALIFIED, HI-BRITE HERMETIC LED INDICATORS

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

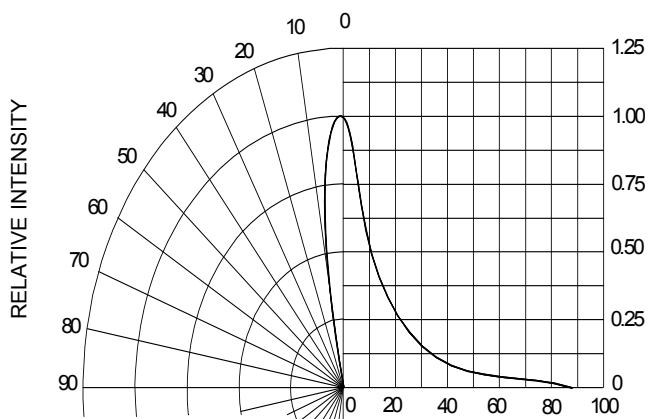
PART NUMBER	COLOR	TEST CONDITION	PARAMETER LIMITS			
			$I_F$ mA	PEAK $\lambda$ TYP.	$I_{V1\theta = 0^{\circ}}$ MIN.	$V_F$ MAX.
62040-10X	RED	20	635	20 mcd	3V	100pF
62040-20X	YELLOW	20	585	20 mcd	3V	100pF
62040-30X	GREEN	20	570	20 mcd	3V	100pF

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