

62040 1N6609
1N6610
1N6611

**JAN AND JANTX QUALIFIED, HI-BRITE
 HERMETIC LED INDICATORS**



09/24/03

Features:

- Hermetically sealed
- Choice of colors (Red, Yellow, Green)
- Panel Mount versions with wire wrappable leads
- Designed for Hi-Reliability applications

Applications:

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

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. Panel mount versions with wire wrap leads are available including necessary hardware. All versions are available in commercial, JAN or JANTX screened.

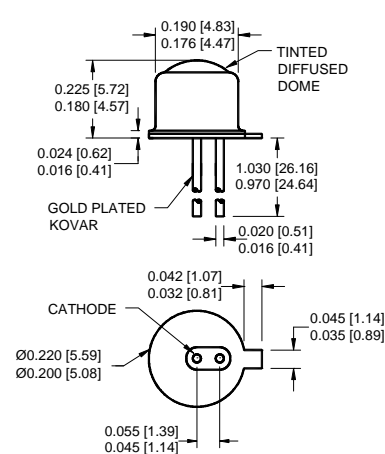
ABSOLUTE MAXIMUM RATINGS

Reverse Voltage	5Vdc
Power Dissipation (Note 1)	120mW
Forward Current-Continuous (Note 2)	35mA
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

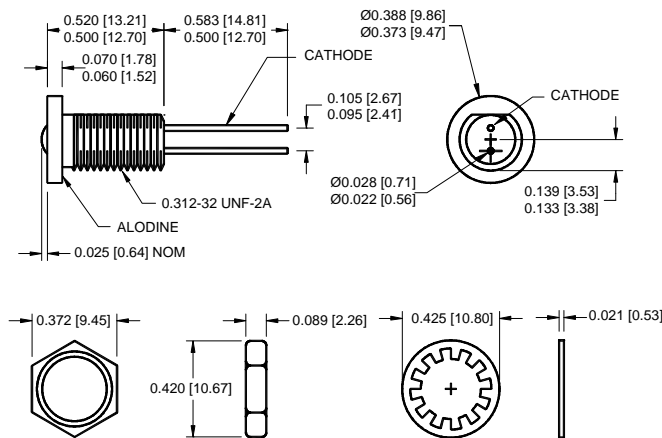
Notes:

1. Derate at the rate of 1.6 mW/°C above 25°C.
2. Derate at the rate of 0.46 mA/°C above 25°C.

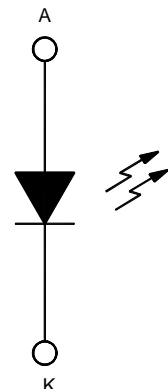
Indicator Dimensions



Panel Mount Dimensions



Schematic Diagram



ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]

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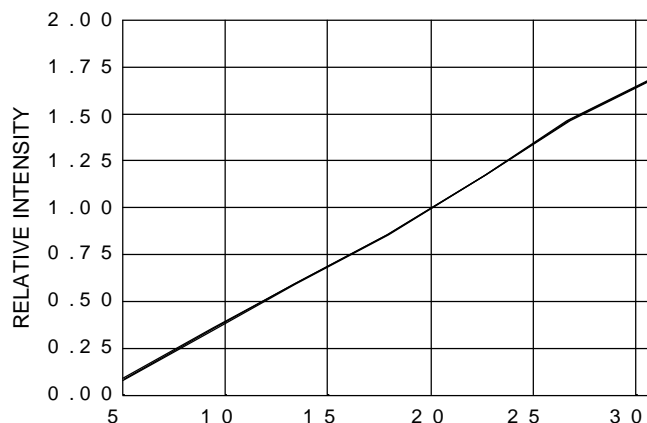
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ELECTRICAL CHARACTERISTICS $T_A=25^{\circ}\text{C}$

PART NUMBER	COLOR	TEST CONDITION	PARAMETER LIMITS			
			I_F mA	PEAK λ TYP.	$I_{V1\theta=0^{\circ}}$ MIN.	V_F MAX.
62040-1XX	RED	20	635	20 mcd	3V	100pF
62040-2XX	YELLOW	20	585	20 mcd	3V	100pF
62040-3XX	GREEN	20	570	20 mcd	3V	100pF

Relative Luminous Intensity

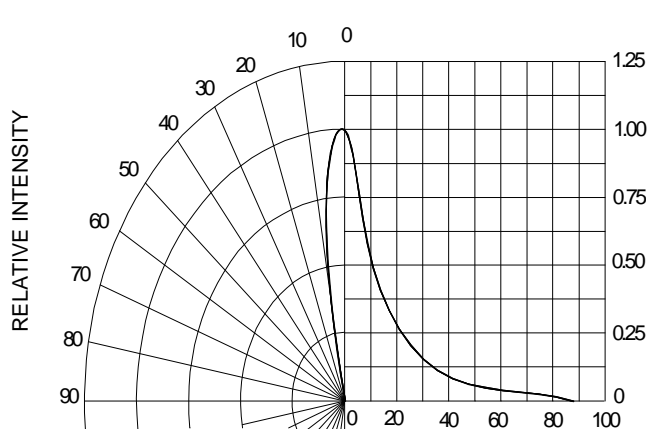
vs
Forward Current
 (Normalized at 20 mA)



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	MIL-PRF-19500/519C
62040-103	JANTX Screened, Red LED, TO-46	MIL-PRF-19500/519C
62040-111	Commercial, Red LED, Panel Mount	
62040-112	JAN Screened, Red LED, Panel Mount	MIL-PRF-19500/519C
62040-113	JANTX Screened, Red LED, Panel Mount	MIL-PRF-19500/519C
62040-201	Commercial, Yellow LED, TO-46	1N6610
62040-202	JAN Screened, Yellow LED, TO-46	MIL-PRF-19500/520C
62040-203	JANTX Screened, Yellow LED, TO-46	MIL-PRF-19500/520C
62040-211	Commercial, Yellow LED, Panel Mount	
62040-212	JAN Screened, Yellow LED, Panel Mount	MIL-PRF-19500/520C
62040-213	JANTX Screened, Yellow LED, Panel Mount	MIL-PRF-19500/520C
62040-301	Commercial, Green LED, TO-46	1N6611
62040-302	JAN Screened, Green LED, TO-46	MIL-PRF-19500/521C
62040-303	JANTX Screened, Green LED, TO-46	MIL-PRF-19500/521C
62040-311	Commercial, Green LED, Panel Mount	
62040-312	JAN Screened, Green LED, Panel Mount	MIL-PRF-19500/521C
62040-313	JANTX Screened, Green LED, Panel Mount	MIL-PRF-19500/521C