

**62035****1N6092  
1N6093  
1N6094****JAN AND JANTX QUALIFIED,  
HERMETIC LED INDICATORS**

09/22/03

**Features:**

- Hermetically sealed
- Choice of colors (Red, Yellow, Green)
- Wide Viewing Angle
- 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

**DESCRIPTION**

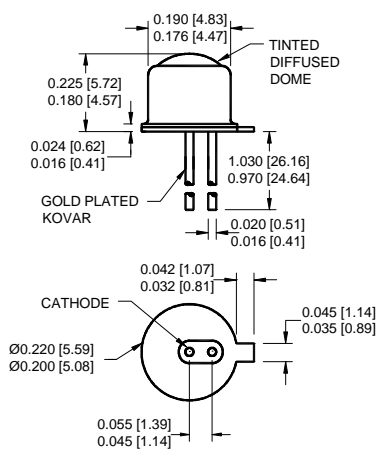
The **1N6092**, **1N6093** and **1N6094** series indicators are hermetically sealed in TO-46 packages. A tinted diffused dome lens provides good on/off contrast and a wide viewing angle. The 1N6092 (red) and 1N6093 (yellow) indicators utilize a high efficiency GaAsP on GaP LED, while the 1N6094 (green) indicator utilizes a GaP on GaP LED. Each type uses a colored diffused plastic lens over a glass window. All versions are available in standard, JAN or JANTX screened levels.

**ABSOLUTE MAXIMUM RATINGS**

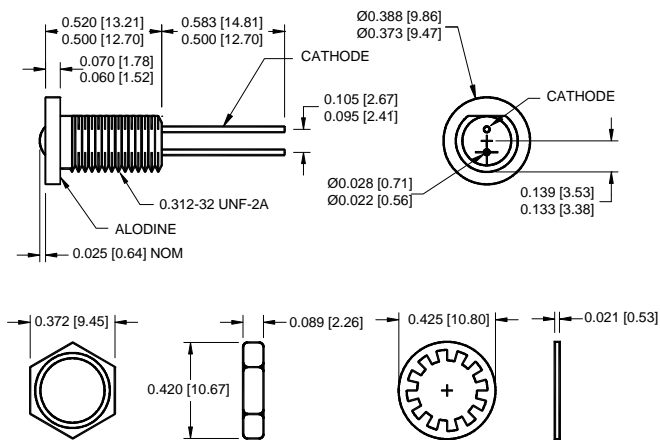
|  |                 |
|--|-----------------|
| Reverse Voltage .....  | 5Vdc            |
| Power Dissipation (Note 1) .....                               | 120mW           |
| Forward Current-Continuous (Note 2) .....                      | 35mA            |
| Storage Temperature .....                                      | -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 :**

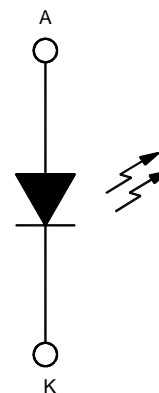
1. Derate at the rate of 1.6 mW/°C above 25°C.
2. Derate at the rate of 0.46 mW/°C above 25°C.

**Indicator Dimensions**

ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]

**Panel Mount Dimensions****NOTES:**

1. ALL EXTERNAL METAL SURFACES OF THE PACKAGE ARE BLACK ANODIZED EXCEPT FOR THE ALODINE AREA OF THE FLANGE AND THE GOLD-PLATED LEADS.
2. MOUNTING HARDWARE WHICH INCLUDES ONE LOCK WASHER AND ONE HEX NUT IS INCLUDED WITH EACH PANEL MOUNTABLE HERMETIC SOLID STATE LAMP.

**Schematic Diagram**

**62035**      **1N6092**  
**1N6093**  
**1N6094**

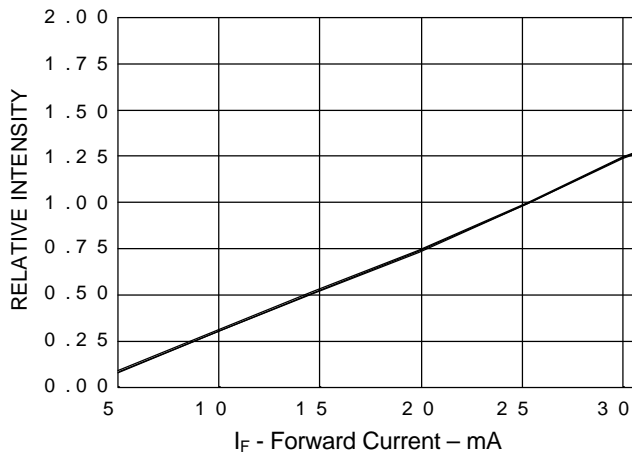
**JAN AND JANTX QUALIFIED, HERMETIC LED INDICATORS**

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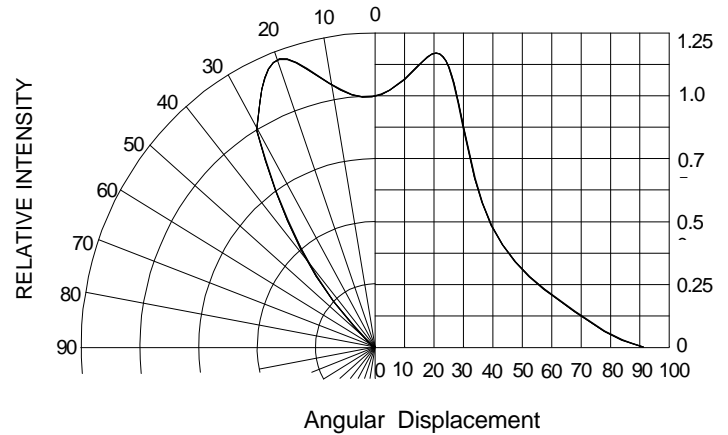
**ELECTRICAL/OPTICAL CHARACTERISTICS TA=25°C**

| PART NUMBER | COLOR  | TEST CONDITION | PARAMETER LIMITS |                        |                                   |                                    |               |
|-------------|--------|----------------|------------------|------------------------|-----------------------------------|------------------------------------|---------------|
|             |        |                | $I_F$<br>mA      | PEAK $\lambda$<br>TYP. | $I_{V1} \theta = 0^\circ$<br>MIN. | $I_{V2} \theta = 30^\circ$<br>MIN. | $V_F$<br>MAX. |
| 62035-1XX   | RED    | 20             | 635              | 3 mcd                  | 1.5 mcd.                          | 3V                                 | 100pF         |
| 62035-2XX   | YELLOW | 20             | 585              | 3 mcd                  | 1.5 mcd.                          | 3V                                 | 100pF         |
| 62035-3XX   | GREEN  | 20             | 570              | 3 mcd                  | 1.5 mcd.                          | 3V                                 | 100pF         |

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



**Relative Luminous Intensity  
vs.  
Angular Displacement**



**RECOMMENDED OPERATING CONDITIONS:**

| PARAMETER             | SYMBOL | MIN | MAX  | UNITS |
|-----------------------|--------|-----|------|-------|
| Forward               | $I_F$  | 20  | 35   | mA    |
| Operating Temperature | $T_A$  | -65 | +100 | °C    |

**SELECTION GUIDE**

| PART NUMBER | PART DESCRIPTION                        | CONTROLLING MIL DOCUMENT |
|-------------|---|--------------------------|
| 62035-101   | Commercial, Red LED, TO-46              | 1N6092                   |
| 62035-102   | JAN Screened, Red LED, TO-46            | MIL-PRF-19500/519C       |
| 62035-103   | JANTX Screened, Red LED, TO-46          | MIL-PRF-19500/519C       |
| 62035-111   | Commercial, Red LED, Panel Mount        |                          |
| 62035-112   | JAN Screened, Red LED, Panel Mount      | MIL-PRF-19500/519C       |
| 62035-113   | JANTX Screened, Red LED, Panel Mount    | MIL-PRF-19500/519C       |
| 62035-201   | Commercial, Yellow LED, TO-46           | 1N6093                   |
| 62035-202   | JAN Screened, Yellow LED, TO-46         | MIL-PRF-19500/520C       |
| 62035-203   | JANTX Screened, Yellow LED, TO-46       | MIL-PRF-19500/520C       |
| 62035-211   | Commercial, Yellow LED, Panel Mount     |                          |
| 62035-212   | JAN Screened, Yellow LED, Panel Mount   | MIL-PRF-19500/520C       |
| 62035-213   | JANTX Screened, Yellow LED, Panel Mount | MIL-PRF-19500/520C       |
| 62035-301   | Commercial, Green LED, TO-46            | 1N6094                   |
| 62035-302   | JAN Screened, Green LED, TO-46          | MIL-PRF-19500/521C       |
| 62035-303   | JANTX Screened, Green LED, TO-46        | MIL-PRF-19500/521C       |
| 62035-311   | Commercial, Green LED, Panel Mount      |                          |
| 62035-312   | JAN Screened, Green LED, Panel Mount    | MIL-PRF-19500/521C       |
| 62035-313   | JANTX Screened, Green LED, Panel Mount  | MIL-PRF-19500/521C       |