

**62035****1N5765****1N6092****1N6093****1N6094****JAN QUALIFIED HERMETIC  
LED INDICATORS****Mii****OPTOELECTRONIC PRODUCTS  
DIVISION****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:**

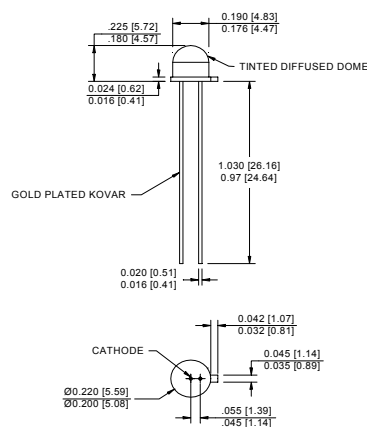
- P.C. Board Fault Indicator
- Logic Status Indicator
- Binary Data Display
- Power supply on/off indicator

**DESCRIPTION**

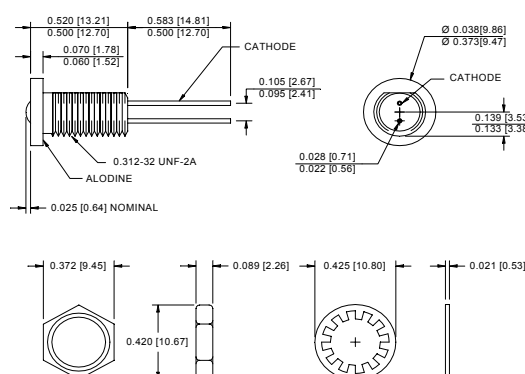
The **1N5765**, **1N6092**, **1N6093** and **1N6094** series indicators are hermetically sealed in TO-46 packages. A tinted diffused dome lens provides good on/off contrast and a wide viewing angle. The 1N5765 indicator utilizes a GaAsP on GaAs LED. The 1N6092 (red) and 1N6093 (yellow) indicators utilize a high efficiency GaAsP on GaP LED, while the 1N6094 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**

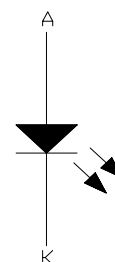
|                                                                                  |                 |
|----------------------------------------------------------------------------------|-----------------|
| Storage Temperature.....                                                         | -65°C to +100°C |
| Operating Temperature .....                                                      | -55°C to +100°C |
| Reverse Voltage .....                                                            | 5Vdc            |
| Reverse Voltage (1N5765).....                                                    | 4Vdc            |
| Power Dissipation (Derate at the rate of 2.4 mW/°C above 50°C) .....             | 120mW           |
| Power Dissipation (1N5765)....(Derate at the rate of 3.0 mW/°C above 50°C) ..... | 150mW           |
| Forward Current-Continuous .....                                                 | 35mA            |
| Forward Current-Continuous (1N5765) .....                                        | 50mA            |
| Lead Soldering Temperature (1/16" (1.6mm) from case for 10 seconds) .....        | 260°C           |
| Maximum Mounting Torque (Panel mount version).....                               | 25in•lbs        |

**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

1N5765

1N6092

1N6093

1N6094

JAN QUALIFIED, HERMETIC LED INDICATORS

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

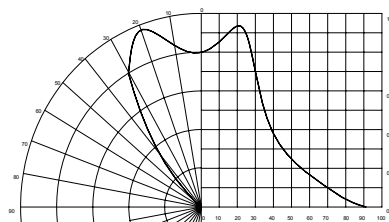
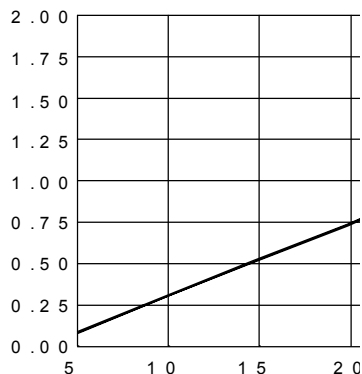
| PART NUMBER          | COLOR  | TEST CONDITION | PARAMETER LIMITS |                          |                           |       |       |
|----------------------|--------|----------------|------------------|--------------------------|---------------------------|-------|-------|
|                      |        |                | PEAK $\lambda$   | $I_{V1\theta = 0^\circ}$ | $I_{V2\theta = 30^\circ}$ | $V_F$ | C     |
|                      |        | $I_F$          | TYP.             | MIN.                     | MIN.                      | MAX.  | MAX.  |
| 1N5765               | RED    | 20             | 655              | .5mcd                    | .3 mcd.                   | 2V    | 300pF |
| 1N6092<br>M19500/519 | RED    | 20             | 635              | 3 mcd                    | 1.5 mcd.                  | 3V    | 100pF |
| 1N6093<br>M19500/520 | YELLOW | 20             | 585              | 3 mcd                    | 1.5 mcd.                  | 3V    | 100pF |
| 1N6094<br>M19500/521 | GREEN  | 20             | 570              | 3 mcd                    | 1.5 mcd.                  | 3V    | 100pF |

**RED/YELLOW**

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

**GREEN**

$I_F$  - Forward Current - mA  
**Relative Luminous Intensity**  
 vs  
**Forward Current**  
 (Normalized at 25mA)

**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 |
|------------------------|------------------------------------|--------------------------|
| JAN or JANTX1N5765*    | TO-46 LED Indicator                | MIL-PRF-19500/467        |
| JAN or JANTX1N6092     | TO-46 LED Indicator                | MIL-PRF-19500/519A       |
| JAN or JANTXM19500/519 | Panel Mount Version, LED Indicator | MIL-PRF-19500/519A       |
| JAN or JANTX1N6093     | TO-46 LED Indicator                | MIL-PRF-19500/520A       |
| JAN or JANTXM19500/520 | Panel Mount Version, LED Indicator | MIL-PRF-19500/520A       |
| JAN or JANTX1N6094     | TO-46 LED Indicator                | MIL-PRF-19500/521A       |
| JAN or JANTXM19500/521 | Panel Mount Version, LED Indicator | MIL-PRF-19500/521A       |

**NOTE:**

1. JAN Quality level is designated by adding -01 to part #.
2. JANTX Quality level is designated by adding -02 to part #.

\*Panel mount version available from factory