

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:

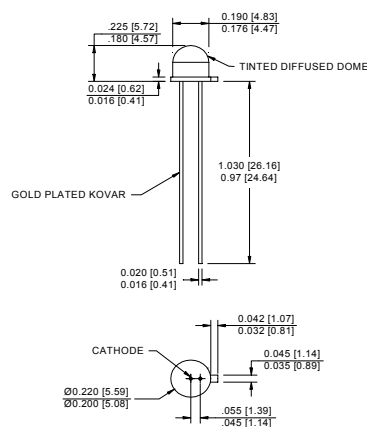
- P.C. Board Fault Indicator
- Logic Status Indicator
- Binary Data Display
- Power supply on/off indicator

DESCRIPTION

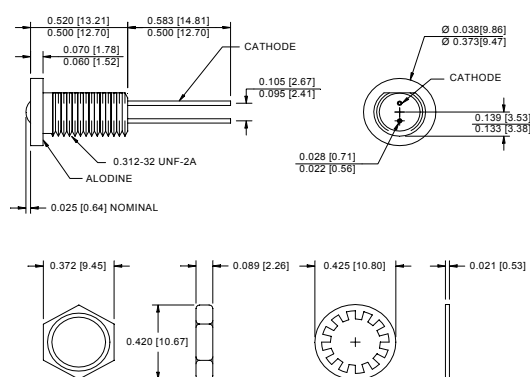
The **1N5765**, **1N6092**, **1N6093** and **1N6094** series indicators are hermetically sealed in TO-46 packages. A tinted diffused dome lens provides good on/off contrast and a wide viewing angle. The 1N5765 indicator utilizes a GaAsP on GaAs LED. The 1N6092 (red) and 1N6093 (yellow) indicators utilize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

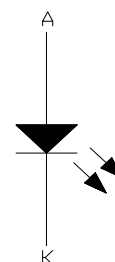
| | |
|--|-----------------|
| Storage Temperature..... | -65°C to +100°C |
| Operating Temperature | -55°C to +100°C |
| Reverse Voltage | 5Vdc |
| Reverse Voltage (1N5765)..... | 4Vdc |
| Power Dissipation (Derate at the rate of 2.4 mW/°C above 50°C) | 120mW |
| Power Dissipation (1N5765)....(Derate 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**

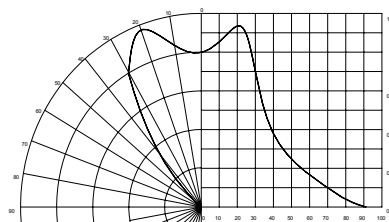
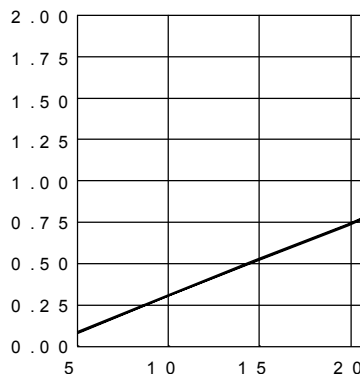
| PART NUMBER | COLOR | TEST CONDITION | PARAMETER LIMITS | | | | |
|----------------------|--------|----------------|------------------|--------------------------|---------------------------|-------|-------|
| | | | PEAK λ | $I_{V1\theta = 0^\circ}$ | $I_{V2\theta = 30^\circ}$ | V_F | C |
| | | I_F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