

Solid Front Water Tight Panel Seal LED Indicator

ML2030

FEATURES

- O-Ring Panel Seal
- Dual Finish Case
- Performs in Severe Environments
- Low Power Use
- Rugged Construction
- Custom Configurations Available including Bi Color LED

Designed for use where a watertight panel seal is required for system performance. Can be used as a function indicator on aircraft avionics systems, test equipment, medical equipment, machine tools, and wherever severe environmental conditions are present.

MECHANICAL SPECIFICATIONS

Case: Aluminum, black anodized front bezel with conductive clear chromate body.

Mounting: Front panel mount with 5/16-32" nut and lock washer.

Seal: Environmentally sealed case. MIL-DTL-3661, Para. 4.6.11.1

O-Ring: Fluoro-silicone rubber

ENVIRONMENTAL SPECIFICATIONS

Vibration: .06"D.A. or 20 G's Peak, whichever is less, 10 Hz to 2 kHz, MIL STD 202, Method 204, Test Condition D.

Shock: 100 G's MIL STD 202, Method 213, Test Condition I.

Moisture Resistance: (Humidity): MIL STD 202, Method 106.

Barometric Pressure (Reduced): 100,000 ft., MIL STD 202, Method 105, Test Condition D.

Reliability: 3 x 10⁶ hours min. MTBF @ 25 °C

Salt Atmosphere: MIL STD 202, Method 101, Test Condition B.

ELECTRO-OPTICAL CHARACTERISTIC SPECIFICATIONS

Color	Absolute Maximum Ratings		
	Red	Yellow	Green
Forward Voltage (VDC)	1.9	2.0	2.1
DC Forward Current (mA DC)*	30	20	30
Reverse Voltage (VDC) @ I _R = 100 µA	5	5	5
Power Dissipation (mW)	135	85	135
Luminous Intensity (mcd) typical @ I _F = 10 mA DC	Non-diffused	50	70
	Diffused	12	12
Dominant Wave Length (nm) typical	626	585	569
Viewing Angle (2 Ø 1/2) typical	Non-diffused	35°	24°
	Diffused	60°	60°
Operating Temperature (°C)	-55 to +100	-55 to +100	-20 to +100
Storage Temperature (°C)	-55 to +100	-55 to +100	-55 to +100
Lead Soldering Temperature	260 °C for 5 seconds		

* For red and green, derate linearly from 50°C @ 0.5 mA/°C. For yellow derate linearly from 50°C @ 0.2 mA/°C

ORDERING INFORMATION

When ordering, show basic part number first, LED color, lens type, and terminal style. If this part requires customization, a special factory assigned modification number will be assigned to the end of the ordering number. Consult factory for special configurations.

Example: Basic model with EMI screen, a red LED, a diffused lens, and looped terminals would be ML 2030E-R-D-LT

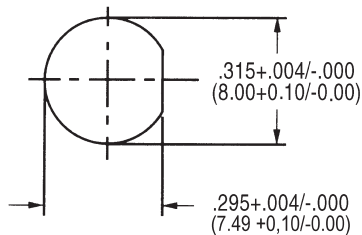
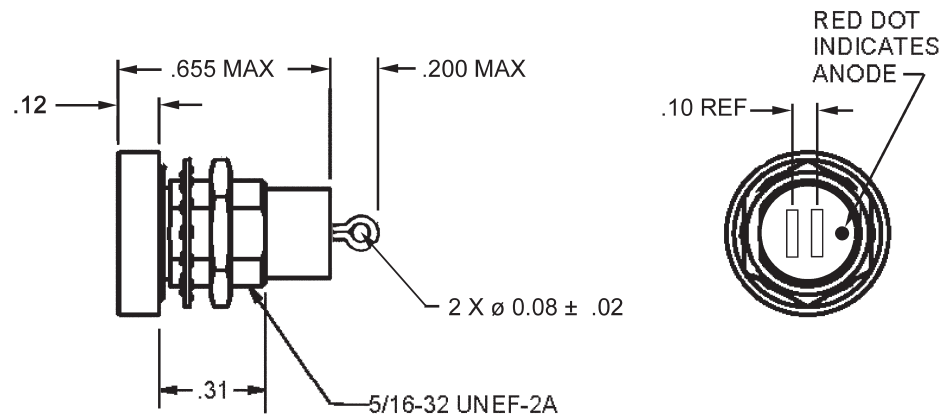
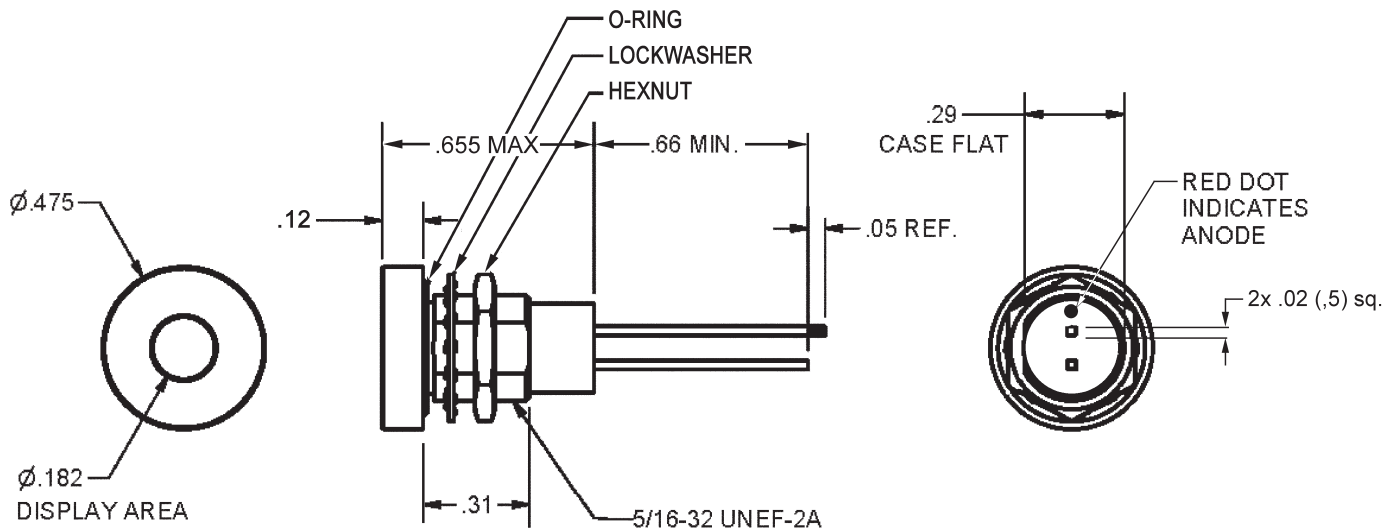
ML2030E - R - D - LT - S ()

Basic Model Number	EMI Screen	LED. Color	Lens Type	Terminal Style
ML2030	() None E Screen	R Red Y Yellow G Green	ND Non-Diffused D Diffused	ST Straight Leads LT Solder Loops

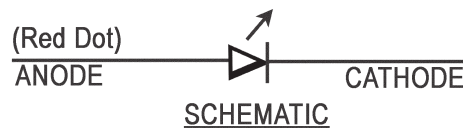
Standard Factory Options are designated by "-Sxxx"

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Recommended Mounting Hole



NOTE:
 $\phi .475$ AND FRONT SURFACE OF FLANGE IS BLACK ANODIZED.
ALL OTHER SURFACES ARE CLEAR CHROMATE.

NOTE:

Dimensions in () are mm. Tolerances: Decimals: $\pm .010$ (0,25) Fractions: $\pm 1/64$ Mounting Torque: 5-7 in. lbs.