

Miniature LED Infrared Secure Lighting Indicator

ML 1618

FEATURES

- Infrared Filtered
- Designed to meet CECOM secure lighting statement of work for drwg. 87019
- Environmentally Sealed
- Colors: Red, Yellow & Green
- Quick Panel Mount Seal, Press-Lock
- Black Contrasting Bezel
- Non-MIL Configurations Available

Developed for use as a function indicator, this solid state lamp with infrared blocking lens is designed to meet the spectral requirements for Secure Lighting per DESC drwg. 87019 and the U.S. Army Statement of Work. It is panel mountable with solderable leads and includes press-lock mounting sleeve. Modified versions to meet MIL-L-85762A NVIS requirements as well as industrial requirements are available.

SPECIFICATIONS

Vibration: .06" D.A. or 20G 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.

Altitude: 100,000 ft., MIL STD 202, Method 105, Test Condition D.

Reliability: Operational 6×10^6 hours. min. MTBF 25°C

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

Seal Test: MIL-L-3661B; 30 PSIG

MECHANICAL SPECIFICATIONS

Case: Aluminum, black anodized

Mounting: Via Press-Lock bushing

Weight: 1.5 grams with hardware

Seal: Environmentally sealed with front panel PTFE Press-Lock bushing.

Lens: Glass

ELECTRO-OPTICAL CHARACTERISTIC SPECIFICATIONS Absolute Maximum Ratings

Color	Red	Yellow	Green
Forward Voltage (VDC)	1.9	2.1	2.2
Peak Forward Current (mA)	90	60	90
DC Forward Current (mA) *	30	20	30
Reverse Voltage (VDC) @ $I_R = 100 \mu A$	5	5	5
Power Dissipation (mW)	135	85	135
Luminous Intensity (mcd) typical @ $I_f = 20$ mA DC	6.0	6.0	6.0
Dominant Wave Length (nm) Typical	626	585	569
Viewing Angle ($2 \theta^{1/2}$) typical	45°	45°	45°
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 model number first, then color. If this is a special part, factory assigned modification number will be added at the end.

Example: Basic unit with standard green color would be model ML1618-G.

ML 1618 - G - S ()

Basic Model Number

ML 1618

Color

(R) Red
(Y) Yellow
(G) Green

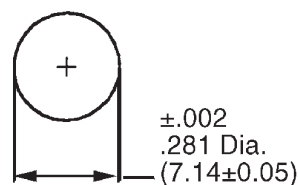
Factory Modification Number (if Special)

S.+ ID No.

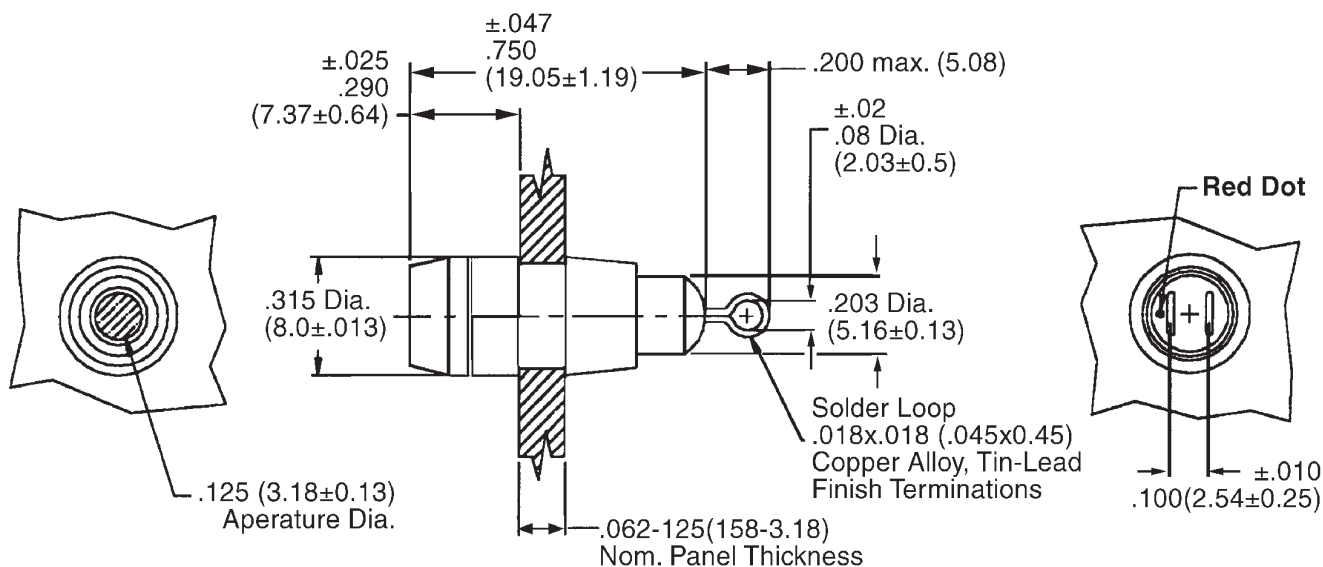
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Mounting Hole Detail



NOTE:

Dimensions, in () are mm.

Tolerances: Decimals: $\pm .010$ (0,25)

Fractions: $\pm 1/64$

Mounting Torque: 5-7 in. lbs.

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