

Infrared Secure LED Indicator

ML1619

This defense article is controlled under the International Traffic in Arms Regulations (ITAR) USML Category XII(e).

FEATURES

- Designed to meet CECOM secure lighting statement of work.
- Environmentally Sealed
- Optional EMI Protection
- Screen Colors: Red, Yellow & Green
- Panel Mount Seal

Developed for use as a function indicator, this solid state lamp with infrared blocking lens is designed to meet the requirements of Secure Lighting per DESC Drwg. 87019 and the U.S. Army Statement of Work. It is panel mountable with solderable leads and includes mounting hardware.

MECHANICAL SPECIFICATIONS

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

Mounting: Front panel by 5/16-32" nut and lockwasher.

Weight: 1.5 grams with hardware.

Seal: Environmentally sealed with front panel PTFE ring seal.

ENVIRONMENTAL SPECIFICATIONS

Vibration: .06 D.A. or 20G PK, 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: 3x10⁶ hrs. minimum MTBF @ 25°C.

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

ELECTRO-OPTICAL CHARACTERISTIC SPECIFICATIONS

Absolute Maximum Ratings @ Temp = 25°C

Colors	Red	Yellow	Green
Forward Voltage (VDC) Typical @ 20 mA	1.9	2.1	2.2
Peak Forward Current (mA) ①	90	60	90
DC Forward Current (mA) ②	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 = 20 mA DC	6.0	6.0	6.0
Dominant Wave Length (nm) typical	626	585	569
Viewing Angle (2 Ø ^{1/2}) typical	32°	32°	32°
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 sec.		

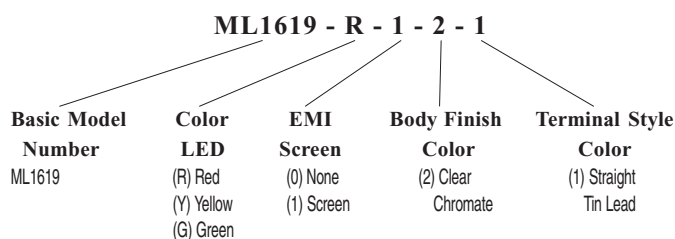
① Typical pulsing values: t_p ≤ 10 µsec, Duty cycle = 10%

② 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 LED color, EMI screen, body finish, and the terminal style desired. If this is a special part, factory assigned modification number will be added at the end of the ordering number. Consult factory for special configurations.

Example: Basic model with red LED with a screen would be model
ML 1619 - R-1-2-1.



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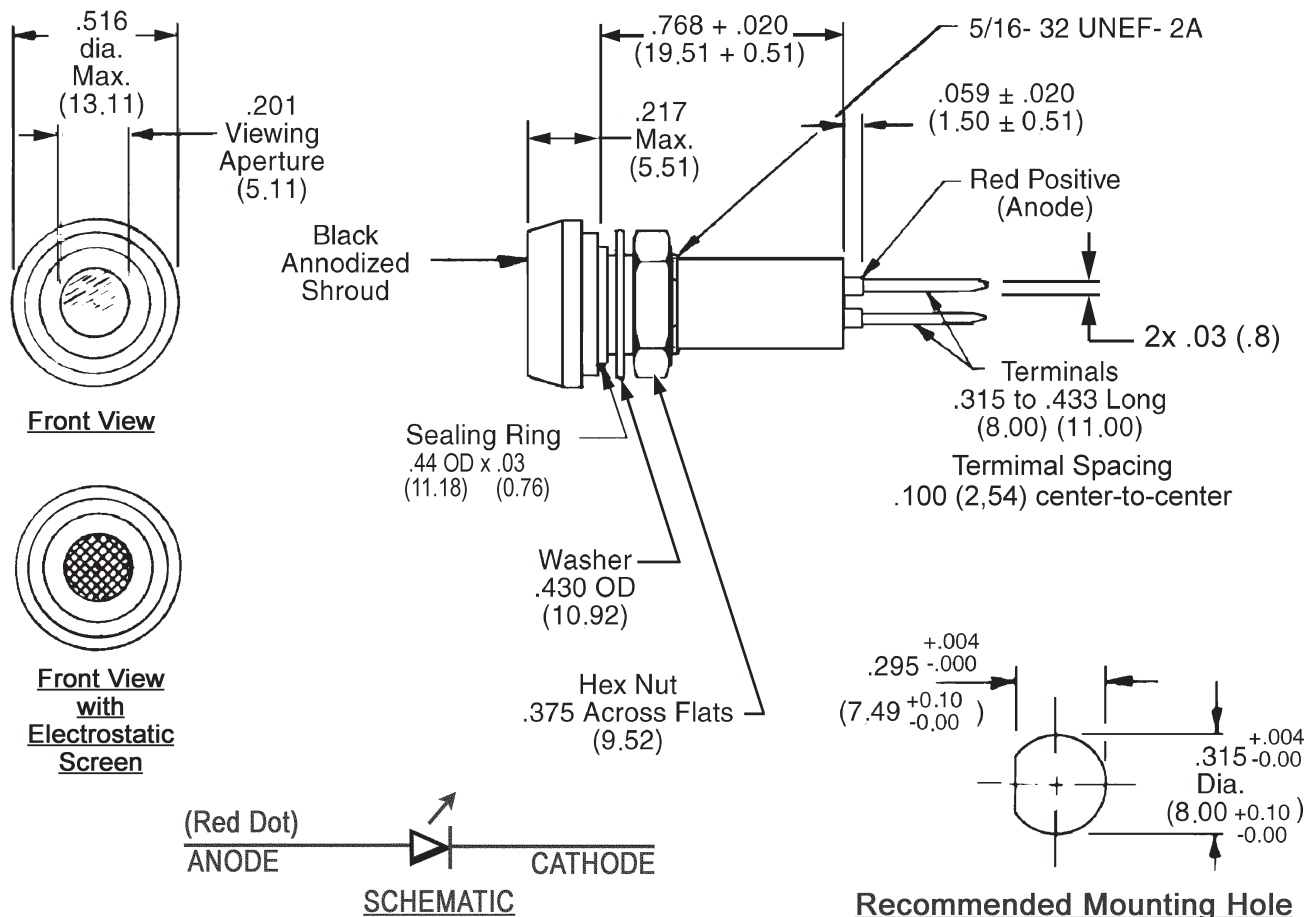
communications
Electrodynamics, Inc.

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LED INDICATORS



NOTE:

Dimensions in () are mm.

Tolerances: Decimals: ± .010 (0.25)

Fractions: ± 1/64

Mounting Torque: 5-7 in. lbs.

L-3 Communications / ElectroDynamics • 1200 Hicks Road • Rolling Meadows, IL 60008 • Tel: 847.660-1750 • Fax: 847.660-1751 • email: edi.info@L-3com.com • www.L-3com.com/edi

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