## LED INDICATOR INFRARED SECURE

### Model ML1619

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

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 drawing 87019 and the U.S. Army Statement of Work. It is panel mountable with solderable leads and includes mounting hardware.

#### **FEATURES**

- Designed to meet CECOM secure lighting statement of work.
- Optional EMI protection
  - Colors: red, yellow, & green
- Environmentally sealed
- yellow, & greenPanel mount seal

#### MECHANICAL SPECIFICATIONS

 $\ensuremath{\textbf{Case:}}$  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 20 Gs Peak, whichever is less, 10Hz to 2kHz, MIL STD 202, Method 204, Test Condition D
Shock: 100 Gs 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 10<sup>6</sup> hours min. MTBF @ 25°C

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

### ELECTRO-OPTICAL CHARACTERISTIC SPECIFICATIONS

Absolute Maximum Ratings @Temp = 25°C				
Color	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) @	30	20	30	
Reverse Voltage (VDC) @ I <sub>R</sub> = 100 µA	5	5	5	
Power Dissipation (mW)	135	85	135	
Luminous Intensity (mcd) typical @ I <sub>F</sub> = 10 mA DC	2.5	5	4	
Dominant Wave Length (nm) typical	626	585	571	
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 seconds		

Notes: ① Typical pulsing values:  $t_p \leq$  10  $\mu sec, \, Duty \, cycle$  = 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

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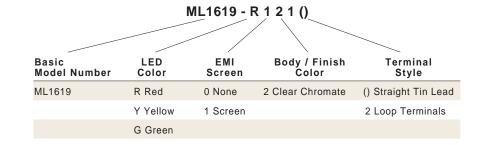
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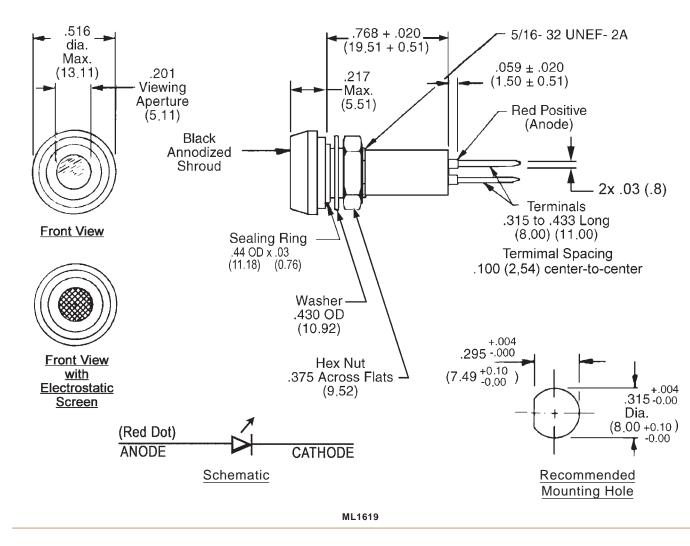
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#### ORDERING INFORMATION

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

Example: Basic model with red LED with a screen would be model ML1619-R-1-2-1.





 NOTE: Dimensions in ( ) are mm.
 Tolerances: Decimals: ± .010 (0.25)

 Fractions: ± 1/64
 Mounting Torque: 5-7 in. Ibs.

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