

LED INDICATOR

DIMMABLE INFRARED SECURE



Model MLD1619

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 indicator provides reduced infrared emissions and variable dimming per CECOM statement of work. It is panel mountable with solderable leads and includes hardware. It can also be produced for non-mil applications.

MLD1619



FEATURES

- Designed to meet CECOM secure lighting statement of work
- Dimmable to 0.05 foot-lamberts
- Optional EMI protection screen
- Colors: red, yellow, & green
- Panel mount seal

MECHANICAL SPECIFICATIONS

Case: Aluminum, conductive clear chromate

Cap: Aluminum, black anodized

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

Seal: Environmentally sealed with front panel PTFE ring seal and internal O-ring seal

Terminal Style: Straight tin/lead

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: 50 Gs MIL STD 202, Method 213, Test Condition G

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 (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) ②	30	20	30
Reverse Voltage (VDC) @ I _R = 100 μA	5	5	5
Power Dissipation (mW)	135	85	135
Luminous Intensity (fL) typical @ I _F = 20 mA DC	2.5	4.0	5.0
Dominant Wave Length (nm) typical	626	585	569
Viewing Angle (2 Ø ^{1/2}) typical	30°	30°	30°
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 ≤ 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

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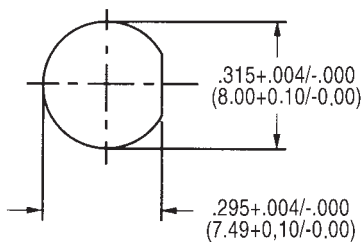
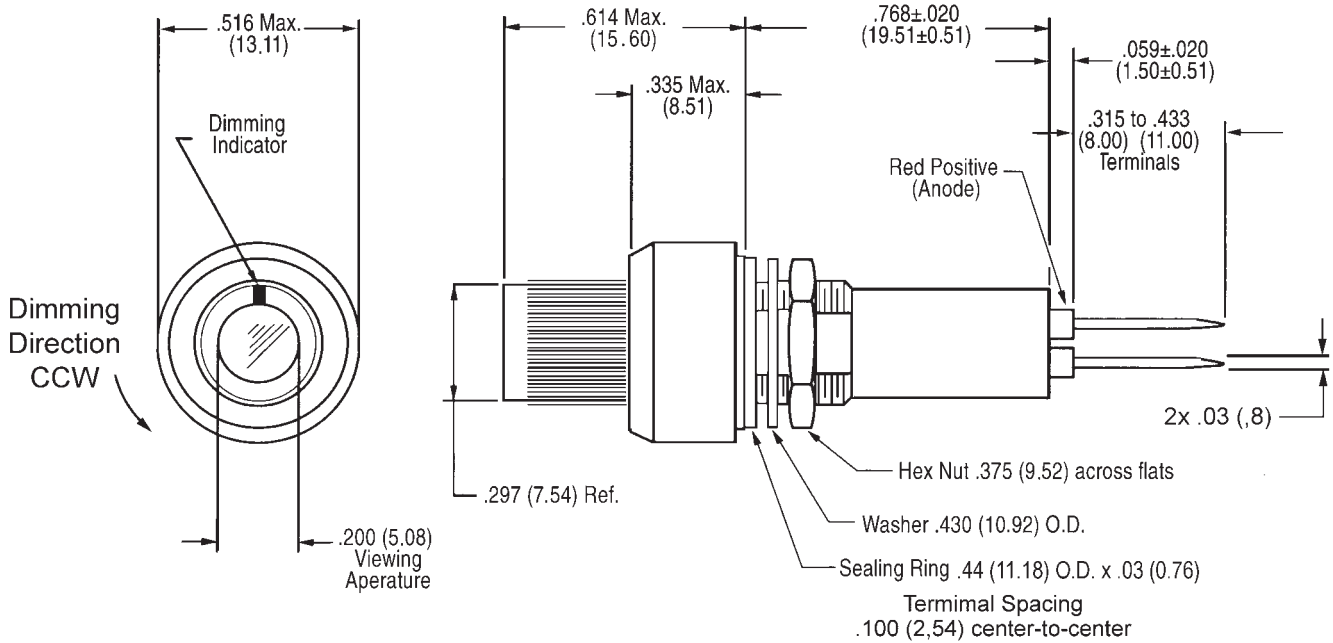
ORDERING INFORMATION

When ordering, show model number first, followed by EMI screen, LED color, lens type, 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.

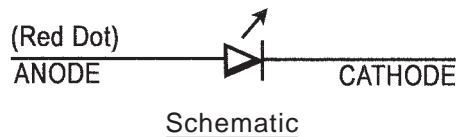
Example: Basic model with an EMI screen, red LED, a non-diffused lens, and straight terminals is MLD1619E-R-ND-ST.

MLD1619E - R - ND - ST

Basic Model Number	EMI Screen	LED Color	Lens Type	Terminal Style
MLD1619	() None	R Red	ND Non-diffused	ST Straight Leads
	E Screen	Y Yellow	D Diffused	
		G Green		



Recommended Mounting Hole



MLD1619

NOTE: Dimensions in () are mm. Tolerances: Decimals: ± .010 (0.25)
Fractions: ± 1/64 Mounting Torque: 5-7 in. lbs.

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