

Infrared Secure LED Indicator

ML 1619



communications
Electrodynamics, Inc.

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.

FEATURES

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

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: 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 hrs. minimum MTBF @ 25°C.

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

ELECTRO-OPTICAL CHARACTERISTIC SPECIFICATIONS Absolute Maximum Ratings

ML 1619

Colors	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 @ $I_f = 20 \text{ mA DC}$	6.0	6.0	6.0
Dominant Wave Length (nm) typical	626	585	569
Viewing Angle ($2 \theta^{1/2}$) 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.		

* 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.

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

ML 1619 - R - 1 - 2 - 1 - S ()

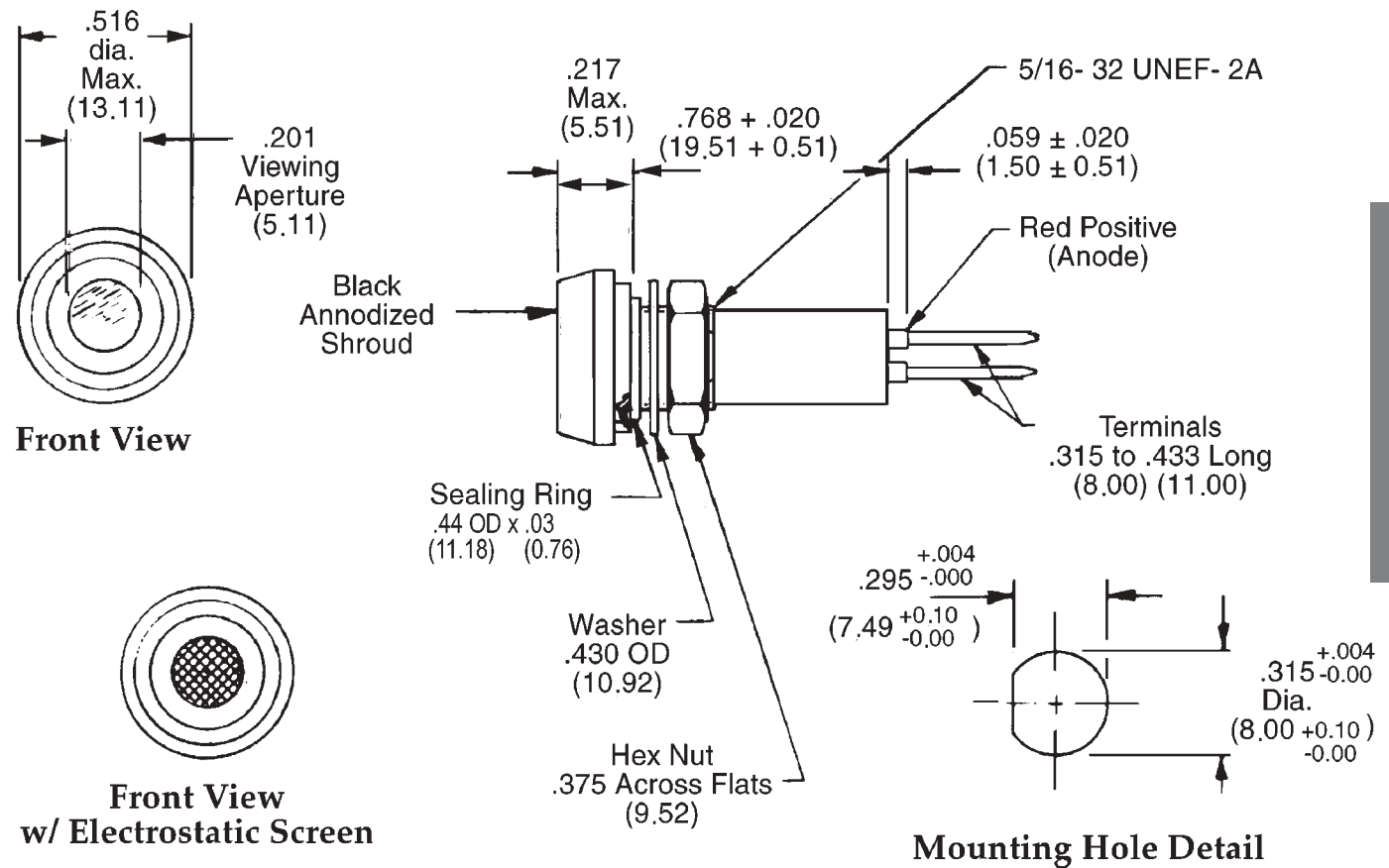
Basic Model Number	Color LED	EMI Screen	Body Finish Color	Terminal Style Color	Factory Modification Number if Special
ML 1619	(R) Red (Y) Yellow (G) Green	(0) None (1) Screen	(2) Clear Chromate	(1) Straight Tin Lead	S.+ ID No.

Infrared Secure LED Indicator

ML 1619



ML 1619



LED INDICATORS