

Infrared Secure Lighting Indicator

ML 1619

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 Dwg. 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: 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 6x10⁶ 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 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	567
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.		

* 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 in 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.

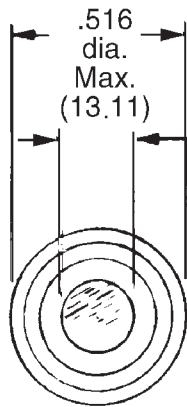
Infrared Secure Lighting Indicator

ML 1619

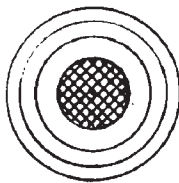


ML 1619

LED INDICATORS



Front View



Front View
w/ Electrostatic Screen

.201
Viewing
Aperture
(5.11)

Black
Anodized
Shroud

Sealing Ring
.35 OD x .03
(8.89) (0.76)

Washer
.430 OD
(10.92)

Hex Nut
.375 Across Flats
(9.52)

.217
Max.
(5.51)

.768 + .020
(19.51 + 0.51)

5/16- 32 UNEF- 2A

.059 ± .020
(1.50 ± 0.51)

Red Positive
(Anode)

Terminals
.315 to .433 Long
(8.00) (11.00)

.295 +.004
-.000
(7.49 +0.10
-0.00)

.315 +.004
-.000
Dia.
(8.00 +0.10
-0.00)

Mounting Hole Detail

NOTE:

Dimensions in () are mm.

Tolerances: Decimals: ± .010 (0.25)

Fractions: ± 1/64

Mounting Torque: 5-7 in. lbs.

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