

MINIATURE LED INDICATOR

INFRARED SECURE



Model ML1618

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 spectral requirements for Secure Lighting per DESC drawing 87019 and the U.S. Army Statement of Work. It is panel mountable with solderable leads, and includes press-lock mounting sleeve. Modified versions to meet MIL-L-85762A NVIS requirements as well as industrial requirements are available.

ML1618



FEATURES

- Infrared filtered
- Colors: red, yellow, & green
- Designed to meet CECOM secure lighting statement of work per DESC drawing 87019
- Quick panel mount seal, Press-lock
- Environmentally sealed
- Black contrasting bezel
- Non-MIL configurations available

MECHANICAL SPECIFICATIONS

Case: Aluminum, black anodized

Mounting: Via Press-Lock bushing

Terminals: Solder loops

Weight: 1.5 grams with hardware

Seal: Environmentally sealed with front panel PTFE press-lock bushing

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 10⁶ hours min. MTBF @ 25°C

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

Seal Test: MIL-DTL-3661C; 30 PSIG

ELECTRO-OPTICAL CHARACTERISTIC SPECIFICATIONS

Absolute Maximum Ratings @Temp = 25°C			
Color	Red	Yellow	Green
Forward Voltage (VDC) typical @ 20 mA	2.6	2.6	3
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	45°	45°	45°
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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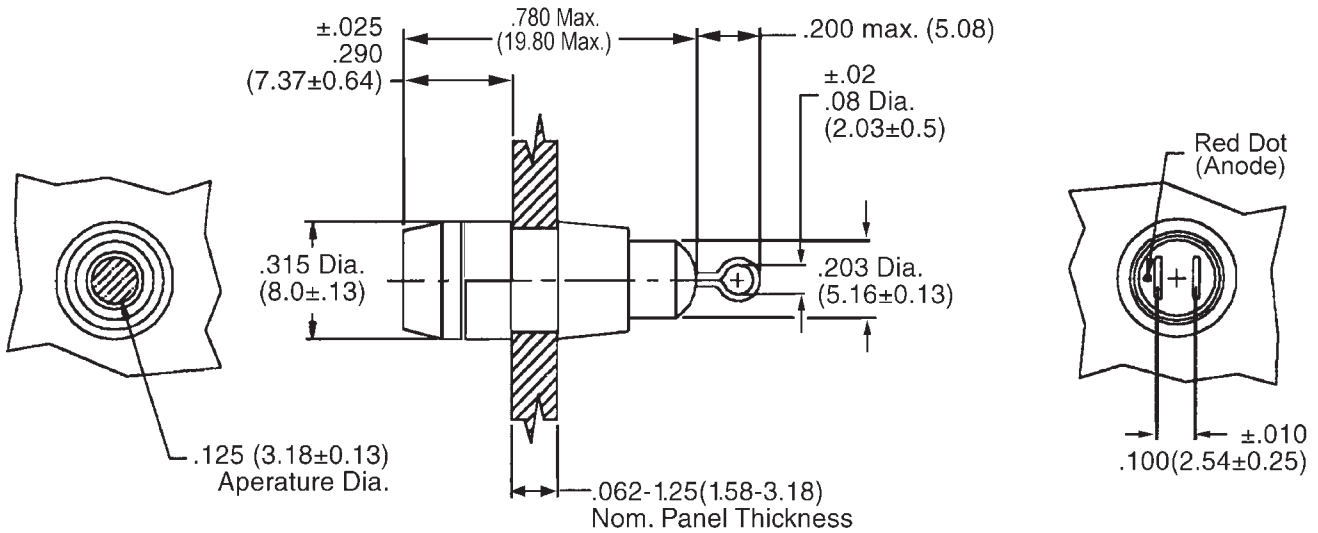
ORDERING INFORMATION

When ordering, show model number first, then color. If this is a special part, a factory assigned modification number will be added at the end. Consult the factory for special configurations.

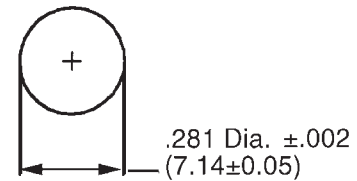
Example: Basic unit with standard green color would be model ML1618-G.

ML1618 - G

Basic Model Number	LED Color
ML1618	R Red
	Y Yellow
	G Green



Schematic



Recommended Mounting Hole

ML1618

LED INDICATORS

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

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