

MINIATURE LED INDICATOR PANEL MOUNT



Models ML1620 & ML1630

Designed for use as function indicators on aircraft, test equipment, machine tools, and wherever severe environmental conditions need to be met, especially vibration and EMI.

FEATURES

- Performs in severe environments
- Low power use
- High efficiency
- Rugged construction
- Readily mounted on panel
- Optional EMI screen
- Optional internal resistor

MECHANICAL SPECIFICATIONS

Case: Aluminum, black anodized front with conductive clear chromate back

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

Seal: Environmentally sealed. Added front panel O-ring seal for model ML1630.



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

ELECTRO-OPTICAL CHARACTERISTIC SPECIFICATIONS*

Absolute Maximum Ratings @Temp = 25°C			
Color	Red	Yellow	Green
Forward Voltage (VDC) typical @ 20 mA (no resistor)	1.9	2.1	2.2
Peak Forward Current (mA DC) ①	90	60	90
DC Forward Current (mA DC) ② (no resistor)	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 = 10 mA DC	Non-diffused	60	40
	Diffused	12	12
Dominant Wave Length (nm) typical	626	585	569
Viewing Angle (2 Ø ^{1/2}) typical	Non-diffused	30°	30°
	Diffused	60°	60°
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

*These characteristics reflect the baseline straight terminal model. Variations may imply a difference in luminous characteristics and/or operability features. Please contact the EDI Sales Department for more information.

This page consists of basic marketing information that is not defined as technical data under EAR Part 772.

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ORDERING INFORMATION

When ordering, show basic part number first, then EMI screen, LED color, lens type, and voltage 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.

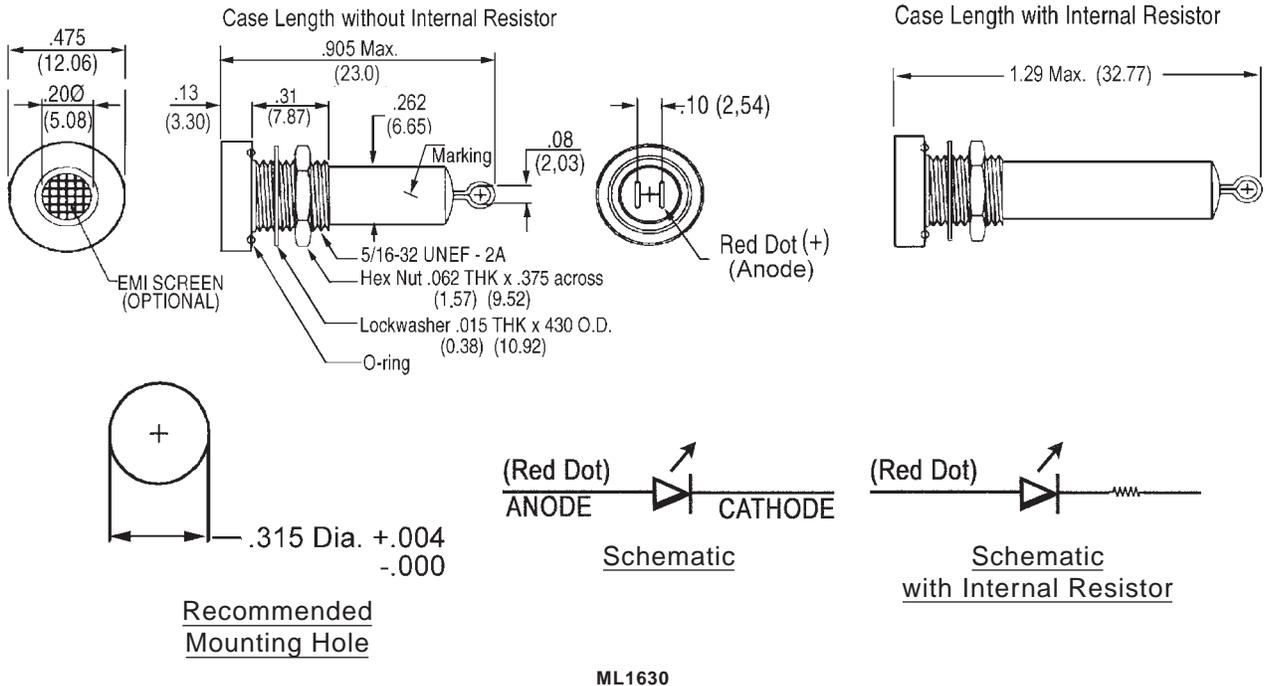
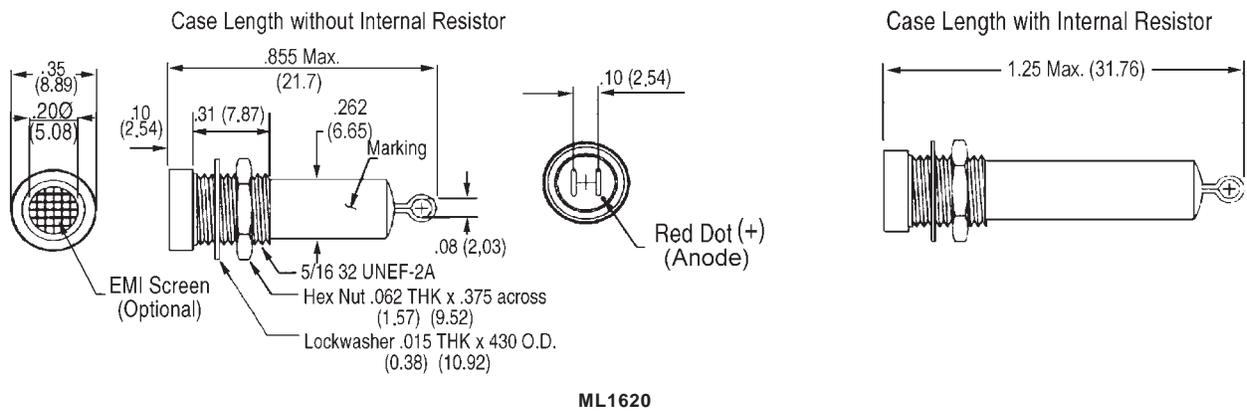
Example: Basic model with an O-ring panel seal, an EMI screen, a red LED, a diffused lens, straight leads, and no internal resistor would be ML1630E-R-D-ST-(-)-(-).

ML1630E - R - D - ST - () - ()

Standard factory options are designated by "-Sxxx"

Basic Model Number	EMI Screen	LED Color	Lens Type	Terminal Style	Internal Resistor
ML1620 (w/o O-ring)	() None	R Red	ND Non-diffused	ST Straight Leads	() No Resistor
ML1630 (with O-ring)	E Screen	Y Yellow	D Diffused	LT Loop Terminals	5 5V*
		G Green			12 12V*
					14 14V*
					24 24V*
					28 28V*

*Operating temperature for internal resistor option is -40°C to +85°C



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

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