

# Rear-Mount LED Indicator

## ML 1636



communications  
Electrodynamics, Inc.



### FEATURES

- Ideal for Rugged Environments
- Environmentally Sealed
- Panel Mount Seal
- Colors: Yellow, Green & Red
- Compact Case Design
- EMI Screen option
- Decorative Bezel Available

Developed for use as a status indicator, the ML 1636 was designed to survive in the most severe environments. The small size and rugged package make it ideal for applications where status indication is critical to the operation of your equipment. The environmentally sealed

case includes an o-ring panel seal that insures the integrity of your system. Comes complete with Fluorosilicone O-ring and mounting hardware.

### ENVIRONMENTAL SPECIFICATIONS

**Vibration:** .06" D.A. or 20G Peak, whichever is less, 10 HZ to 2 kHz, MIL STD 202, Method 20D", Test Condition D.  
**Shock:** 100 G's MIL STD 202, Method 213, Test Condition D.  
**Moisture Resistance (Humidity):** MIL STD 202, Method 106.  
**Altitude:** 100,000 ft., MIL STD 202, Method 105, Test Condition D.  
**Reliability:** Operational 6x10<sup>6</sup> hours minimum. MTBF @ 25°C  
**Salt Spray:** MIL STD 202, Method 101, Test Condition B.

### MECHANICAL SPECIFICATIONS

**Case:** Aluminum, black anodized, standard.  
 Clear chromate case with EMI screen optional.  
**Mounting:** Rear-mount by 5/16-32" nut and lockwasher  
**O-Ring:** Fluorosilicone rubber

### ELECTRO-OPTICAL CHARACTERISTIC SPECIFICATIONS Absolute Maximum Ratings

ML1636

Color	Red	Yellow	Green
Forward Voltage (VDC)	2.1	2.1	2.1
Peak Forward Current (mA)	90	60	90
DC Forward Current (mA)	30	20	30
Reverse Voltage (VDC) @ I <sub>r</sub> = 100 μA	5	5	5
Power Dissipation (mW)	105	105	105
Luminous Intensity (mcd)	20	20	10.6
typ @ I <sub>f</sub> =20 mA	Non Diffused Diffused	8	8
Dominant Wave Length (nm) typical	625	590	565
Viewing Angle	Non Diffused Diffused	30° 60°	30° 60°
Operating Temperature (°C)	-50 to +100	-50 to +100	-50 to +100
Storage Temperature (°C)	-50 to +100	-50 to +100	-50 to +100
Lead Soldering Temperature	260°C for 5 seconds		

\* DC forward current derating: red and green derate linearly from 50° @ 0.5 mA/°C  
 yellow derate linearly from 50°C @ 0.2 mA/°C

### ORDERING INFORMATION

When ordering, show model number first, followed by EMI screen, then LED color, lens style and terminal style. If this is a special part, the factory assigned modification number will be added at the end of the ordering number.

Example: Basic model without an EMI screen, with a yellow LED a diffused lens and straight leads would be ML1636-Y-D-ST.

### ML 1636E - Y - D - ST - S ( )

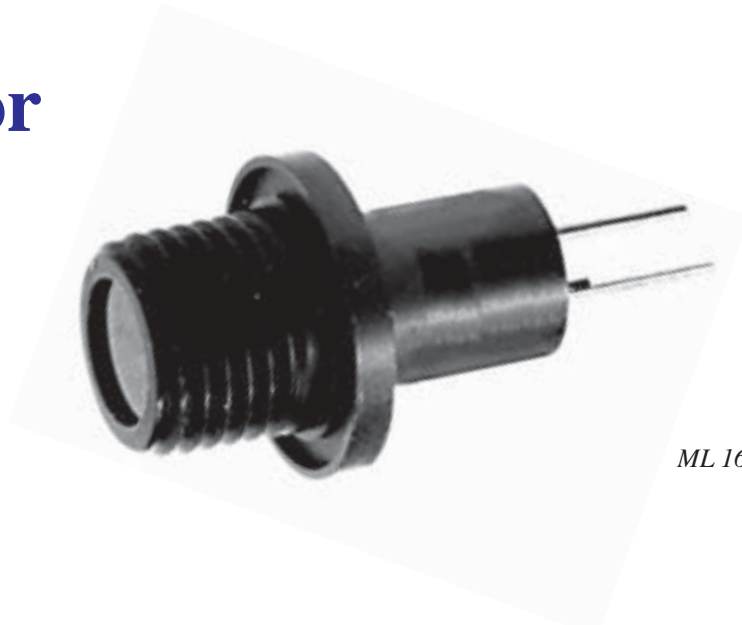
Basic Model Number	EMI Screen	Color LED.	Lens Type	Terminal Style	Factory Modification Number if Special
ML 1636	( ) None E Screen	R Red Y Yellow G Green	ND Non-Diffused D Diffused	ST Straight Lead LT Solder Loop	S.+ ID No.

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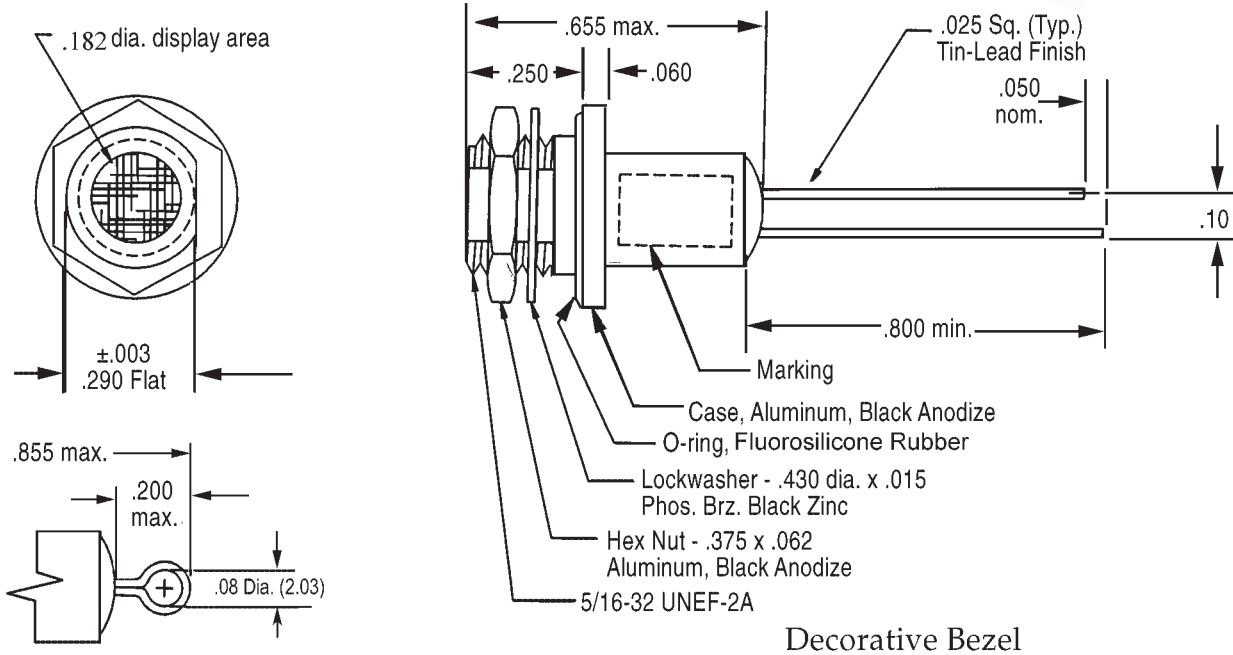
ML1636



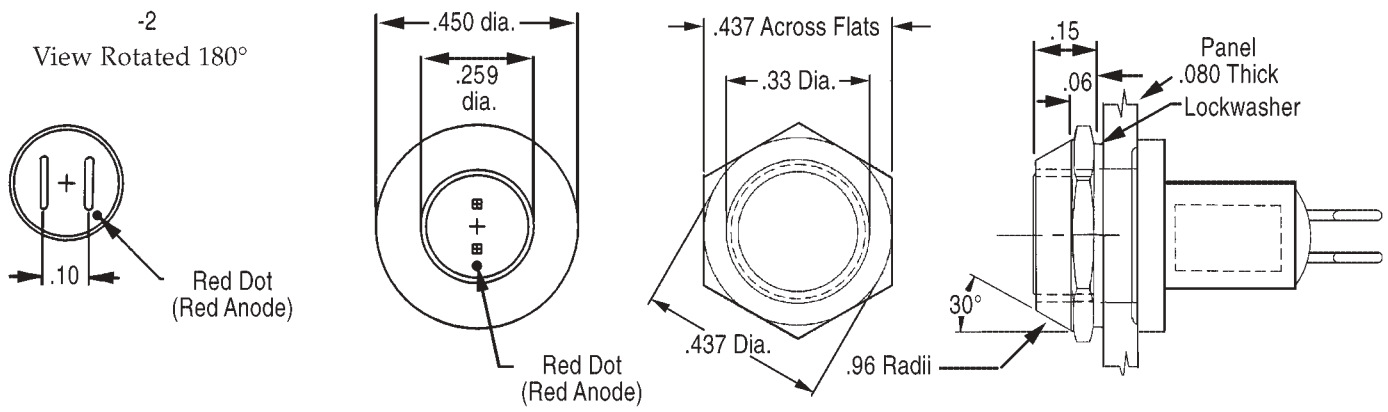
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ML 1636



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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