

NVIS Compatible Rear-Mount Lighting Indicator ML 1638

FEATURES

- Designed to meet MIL-L-85762A Lighting, Aircraft, Interior Night Vision, Imaging System (NVIS) compatible
- Environmentally Sealed
- Panel Mount Seal
- Colors: Yellow & Green
- Compact Case Design
- Decorative Bezel
- Optional EMI Screen

The ML1638 status indicator was designed to meet the requirements of MIL-L-85762A. This solid state LED indicator has an infrared blocking lens that is compatible with NVIS environments. It is a rear-mount indicator and comes complete with O-ring and mounting hardware.

ENVIRONMENTAL SPECIFICATIONS

Vibration: .06 D.A. or 20G PK, whichever is less, 10 HZ to 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 hours min. 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

Storage Temperature: -55°C to +100°C.

Operating Temperature: -55°C to +100°C - Yellow

-20°C to +100°C - Green

ELECTRO-OPTICAL CHARACTERISTIC SPECIFICATIONS Absolute Maximum Ratings

ML1638

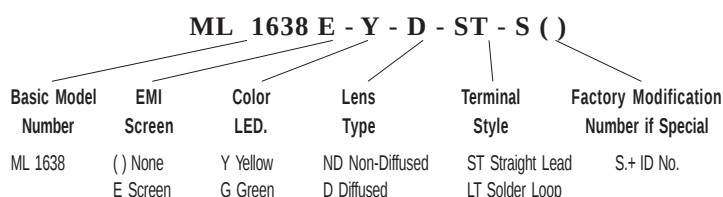
Color	NVIS Yellow	NVIS Green
Forward Voltage (VDC)	2.4	2.7
Peak Forward Current (mA)	60 mA	90 mA
DC Forward Current (mA) (see Note)	20 mA	30mA
Reverse Voltage @ $I_R = 100 \mu A$	5	5
Power Dissipation (mW) typical	85	135
Luminous Intensity (mcd)	Non Diffused	3.0
@ $I_F = 20$ mA typical	Diffused	0.6
Chromaticity Per MIL-L-85762A	NVIS Yellow	NVIS Green B
NVIS Radiance Per MIL-L-85762A	$NR_A 1.5 \times 10^{-7} @ 15FL$	$NR_A 1.7 \times 10^{-10} @ 0.1FL$
Viewing Angle (2 Ø $^{1/2}$)	Non Diffused	32°
	Diffused	50°
Operating Temperature (°C)	-55 to +100	-20 to +100
Storage Temperature (°C)	-55 to +100	-55 to +100

NOTE: . DC Forward Current Derating. Yellow indicators, derate linearly from 50°C at 0.2 mA per °C. Green indicators, derate linearly from 50°C at 0.2 mA per °C.

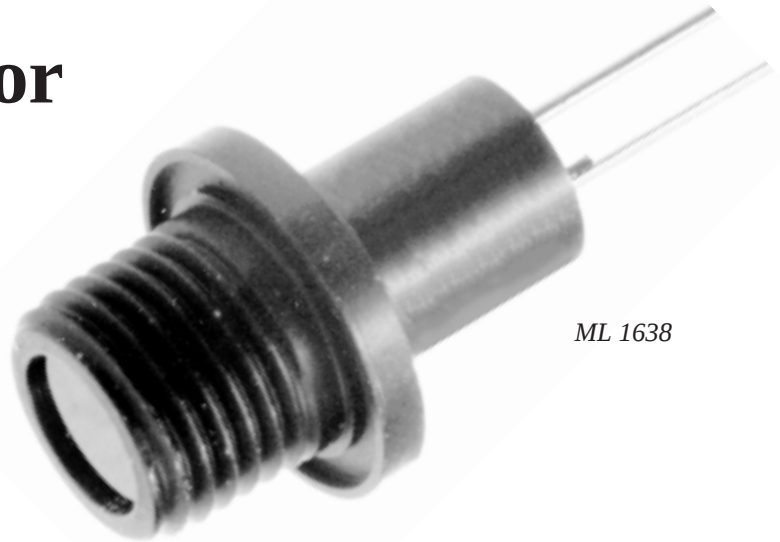
ORDERING INFORMATION

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

Example: Basic model, with an EMI screen, NVIS yellow LED, diffused lens, and straight leads would be ML1638 E-Y-D-ST.

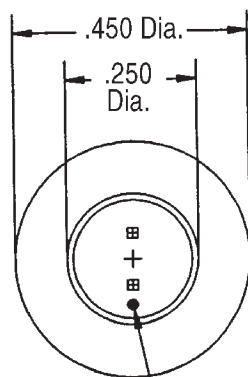
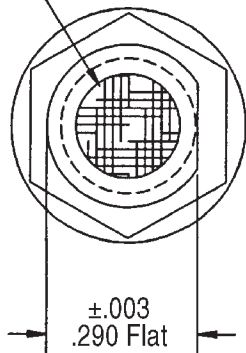


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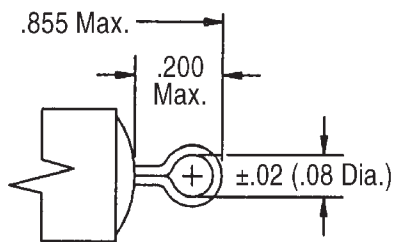
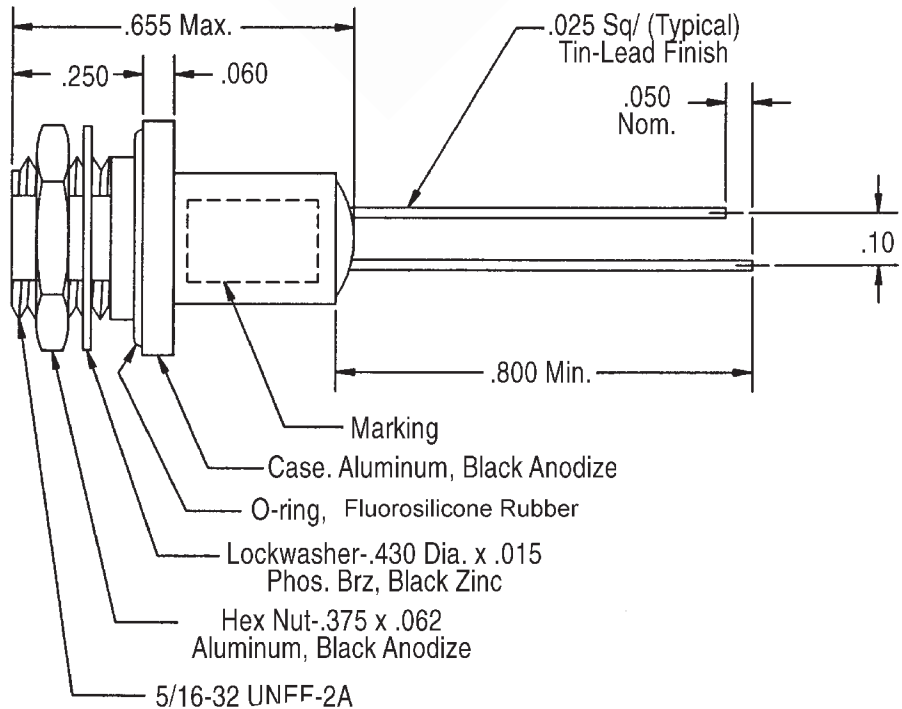


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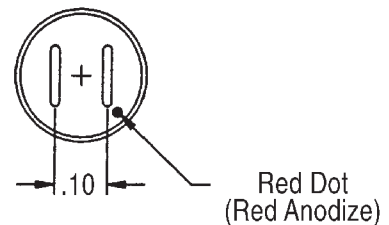
.182 Dia. Display Area



Red Dot
(Red Anode)



-2
View Rotated 180°



NOTE:

Dimensions in () are mm. Tolerances: Decimals: $\pm .010$ (0,25) Fractions: $\pm 1/64$ Mounting Torque: 5-7 in. lbs.

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