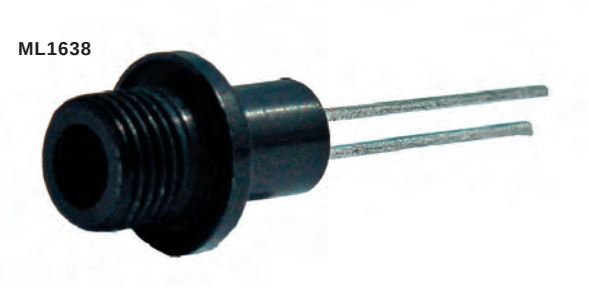
LED INDICATOR
NVIS COMPATIBLE REAR-MOUNT

Model ML1638

The ML1638 status indicator was designed to meet the requirements of MIL-L-85762A and MIL-STD-3009. 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.



Standard Case

FEATURES

- Designed to meet MIL-L-85762A and MIL-STD-3009 lighting, aircraft, interior night vision imaging system (NVIS) compatible
- Environmentally sealed
- Panel mount seal
- Colors: red, yellow & green
- Compact case design
- Decorative bezel
- Optional EMI screen

MECHANICAL SPECIFICATIONS

Case: Aluminum, black anodized, standard. Clear chromate case with EMI screen option.

Mounting: Rear-mount by 5/16"-32 nut and lockwasher

O-ring: Fluorosilicone rubber

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 10^6 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		**NVIS Red**	**NVIS Yellow**	**NVIS Green B**
Forward Voltage (VDC) typical @ 20 mA		2.0	2.0	2.1
DC Forward Current (mA) ①		50	20	50
Reverse Voltage @ I_R = 100 µA		4	5	4
Power Dissipation (mW) typical		120	85	120
Luminous Intensity (mcd) typical @ I_F = 20 mA	Non-diffused Diffused	200 100	3.0 1.8	20 10
Chromaticity per MIL-L-85762A & MIL-STD-3009		NVIS Red	NVIS Yellow	NVIS Green B
Dominant Wave Length (nm) typical		605	585	558
NVIS Radiance per MIL-L-85762A & MIL-STD-3009		NR_B 1.4 x 10^{-7} @15 fL	NR_A 1.5 x 10^{-7} @15 fL NR_B 1.4 x 10^{-7} @15 fL	NR_A 1.7 x 10^{-10} @0.1 fL NR_B 1.7 x 10^{-10} @0.1 fL
Viewing Angle (2 Ø $^{1/2}$) typical	Non-diffused Diffused	30° x 50° 50°	32° 50°	32° 50°
Operating Temperature (°C)		-40 to +100	-55 to +100	-40 to +100
Storage Temperature (°C)		-55 to +100	-55 to +100	-55 to +100

Notes: ① DC Forward Current Derating. Yellow indicators, derate linearly from 50°C at 0.2 mA per °C. Green & Red indicators, derate linearly from 50°C at 0.5 mA per °C

*These characteristics reflect the baseline 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

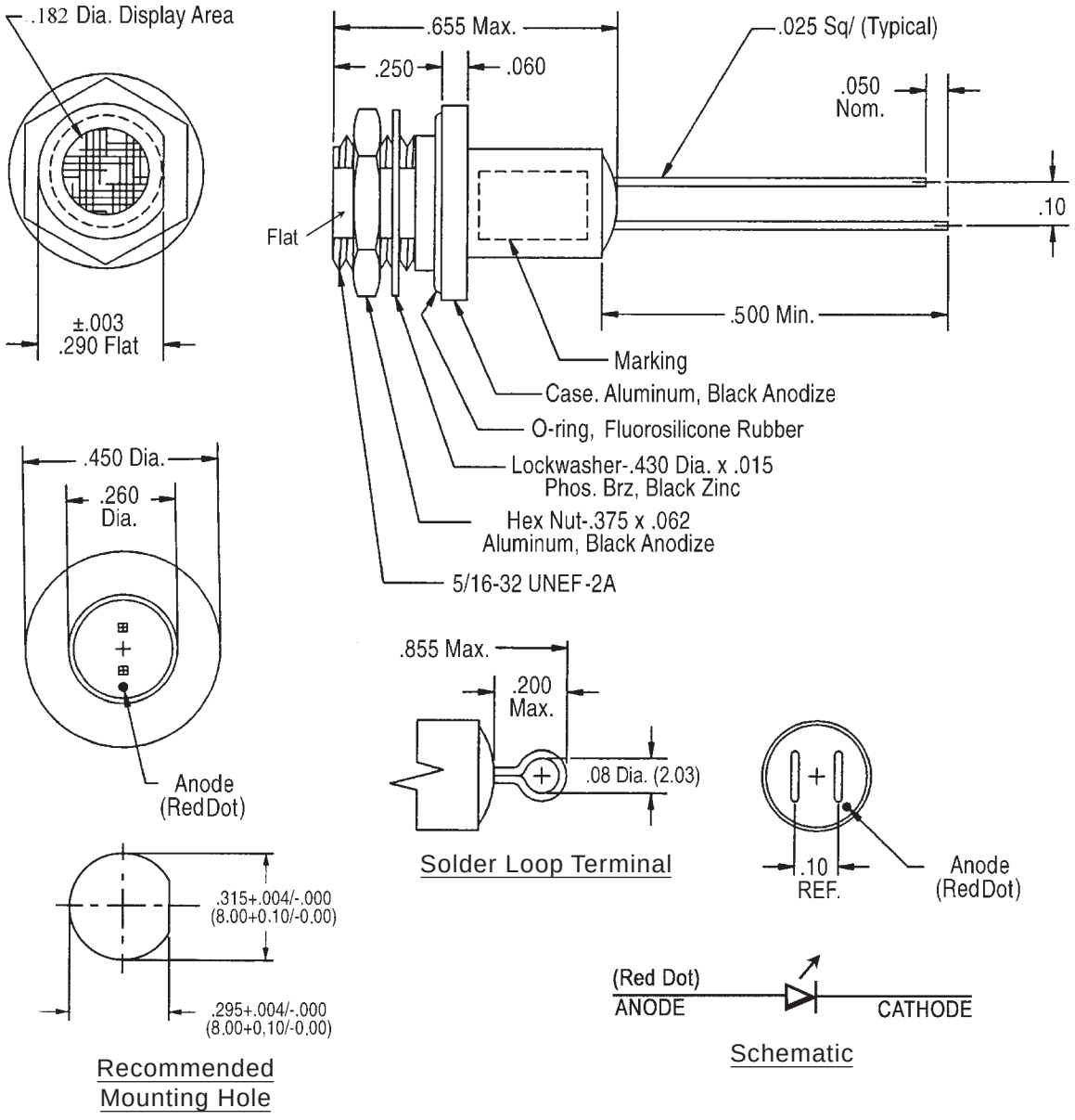
When ordering, show model number first, followed by EMI screen, then LED color, lens type, and terminal style. If this is a special part, a factory assigned modification number will be added at the end of the ordering number. Consult the factory for special configurations.

Example: Basic model, with an EMI screen, NVIS yellow LED, diffused lens, and straight leads would be ML1638E-Y-D-ST.

ML1638E - Y - D - ST - ( )

Standard factory options are designated by "-Sxxx"

Basic Model Number	EMI Screen	LED Color	Lens Type	Terminal Style
ML1638	( ) None	R Red	ND Non-diffused	ST Straight Leads
	E Screen	Y Yellow	D Diffused	LT Loop Terminals
		G Green		



ML1638

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

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