## **BITE Indicators**

## Model MI 6I SA Qualified to MIL-I-83287/1

#### **FEATURES**

- Manual Reset Return
- Magnetic Latching
- Environmentally Sealed
- Random Vibration capability

The MI61SA (MIL-I-83287/1) series magnetic latching fault indicator displays highly visible dual color internal flag when the indicator coil is pulsed by a BITE (Built-In Test Equipment) system. The "cloverleaf" pattern provides a high contrast visual indication and an effective warning of system results.

#### **OPERATION**

When the indicator coil is energized with a 40 millisecond (or longer) pulse, the highly visible display disc rotates and latches to the magnetic core. The display disc will remain magnetically latched to the core in the position last pulsed. Even if the fault signal is removed, the indicator will "remember" that a fault had occurred.

Return to the "No-Fault" position is accomplished mechanically by rotating the knurled knob clockwise to 60°. The knob automatically returns to its normal position.

Optional features include insulated lead wire or solder loop termination, non-glare lens, and RFI panel shield. Consult your representative or the factory for details.

#### ELECTRICAL SPECIFICATIONS

Standard Coil Voltages and Resistances

DC Coil Resistance	Nominal	Operating Voltage	
in Ohms, +10%	Voltage DC	Min	Max
@ 25°C		Required	Allowed
9	3	2.4	3.6
25	5	4.0	6.0
37	6	4.8	7.2
145	12	9.6	14.4
400	20	16.0	28.8
590	24	19.2	30.0
800	28	22.4	35.0

Pulse Power: One Watt.

Nominal Pulse Length: 40 milliseconds, minimum.

Dielectric Withstanding Voltage: 500 V RMS.

Insulation Resistance: Mil Spec: Per MIL-I-83287,

100 megohms minimum at 500 VDC.

**Electromagnetic Interference and Magnetic Susceptibility:** 

Per MIL-1-83287. MI 61 SA will not malfunction of false transfer when subjected to a 20 ampere turn field at 400 Hertz.

### MECHANICAL SPECIFICATIONS

Case: Black anodized aluminum.

**Mounting**: Front panel mount (D hole or keyed washer).

Weight: 13 Grams

**Display Colors**: "NO-FAULT" is black,

"FAULT" is black/white, as shown.

**Leads**: 8 inches of #26 Teflon Insulated standard wire or Solder loops.

#### **ENVIRONMENTAL SPECIFICATIONS**

**Operating Temperature Range**: -65°C to + 125°C. **Vibration\***:

Sinusoidal: .06" D.A. or 20 G Peak, whichever is less,

10 Hz to 2 kHz per MIL STD 202, Method 204, Test Condition D.

Random: 11.6 G's rms per MIL STD 202, Method 214,

Test Condition D, Curve 1.

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.

Thermal Shock: MIL STD 202, Method 107, Test Condition 13.

Salt Spray: MIL STD 202, Method 101, Test Condition B.

Life: 10,000 cycles at cycling rate of 10 per minutes.

**Barometric Pressure**: MIL STD 202, Method 105, Test Condition D, with 350 Volts AC. RMS.

\*During vibration testing caution should be taken to the indicator from the strong magnetic field.

**Factory Modification** 

**Number if Special** 

S + ID No.

Patent No. 4,661,813

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#### Model MI 6I SA - 12 - W / BLK - LT-S **ORDERING INFORMATION** When ordering, show model number first, then coil voltage desired, then the color combination desired. If this is a special part, factory assigned modification number will be added at the end of the Basic Model Coil Fault No Fault Terminal ordering number. Voltage Color Number Color Type MI 61 SA 3 W/BLK BLK Black WL-Wire Leads 5 White/Black LT-Solder Loops 6 Basic model for 12 volts with all black for reset color and white for set (fault) 12 color would be Model MI 61 SA -12- B/W.

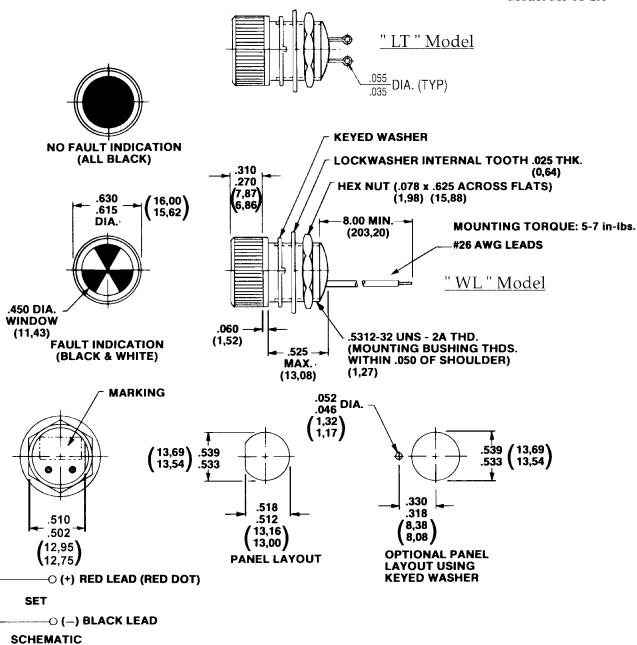
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# communications Electrodynamics, Inc.

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Model MI 61 SA



#### NOTE:

Dim. in ( ) are mm. Tolerances: Decimals: ± .010 (0,25), Fractions: ± 1/64—All mounting hardware is black anodized aluminum. Mounting Torque: 5-7 in. lbs.