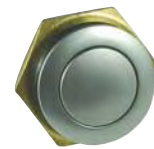


## Series 57M-EM

### MINIATURE PANEL SEALED METAL

The 57M is a miniature switch designed for rugged environments. The housing is zinc alloy with velour chrome plating. It is available as maintained or momentary action, Electro-mechanical operation with Gold plated contacts and solder terminals. It is ideal for a multitude of applications.



ACTUAL SIZE

### APPLICATIONS

- Security Equipment
- Industrial Control
- Medical Equipment
- Military Equipment
- Food Processing
- Transportation
- Computers

### KEY FEATURES:

- Zinc Alloy/Velour Chrome Plated
- Center Spot LED and Non-Lighted Versions
- Maintained or Momentary Action
- Panel Sealed to IP67
- RoHS Compliant
- Electro-Mechanical
- Gold Plated Contacts and Terminals

### ORDERING INFORMATION:

#### SWITCH FUNCTION:

1. MECHANICAL, MOMENTARY, SOLDER TERMINAL
2. MECHANICAL, MAINTAINED, SOLDER TERMINAL
5. MECHANICAL, MOMENTARY, PC TERMINAL
6. MECHANICAL, MAINTAINED, PC TERMINAL
- A. MECHANICAL, MOMENTARY, WIRE LEADS
- B. MECHANICAL, MAINTAINED, WIRE LEADS
9. SPECIAL, DIGITS ARE IN SERIAL ORDER

#### HOUSING MATERIAL:

1. ZINC ALLOY, VELOUR CHROME PLATED
2. ZINC ALLOY, MIRROR BLACK

#### ILLUMINATION:

0. NON-LIT
1. CENTER SPOT ILLUMINATION
2. RING ILLUMINATION
3. STANBY LOGO ILLUMINATION

#### LED COLOR:

- N. NONE
- G. GREEN L.E.D.
- R. RED L.E.D.
- A. AMBER L.E.D.
- B. BLUE L.E.D.
- W. WHITE L.E.D.

#### VOLTAGE RESISTOR

- IF BLANK \*
- 05 5V FORWARD

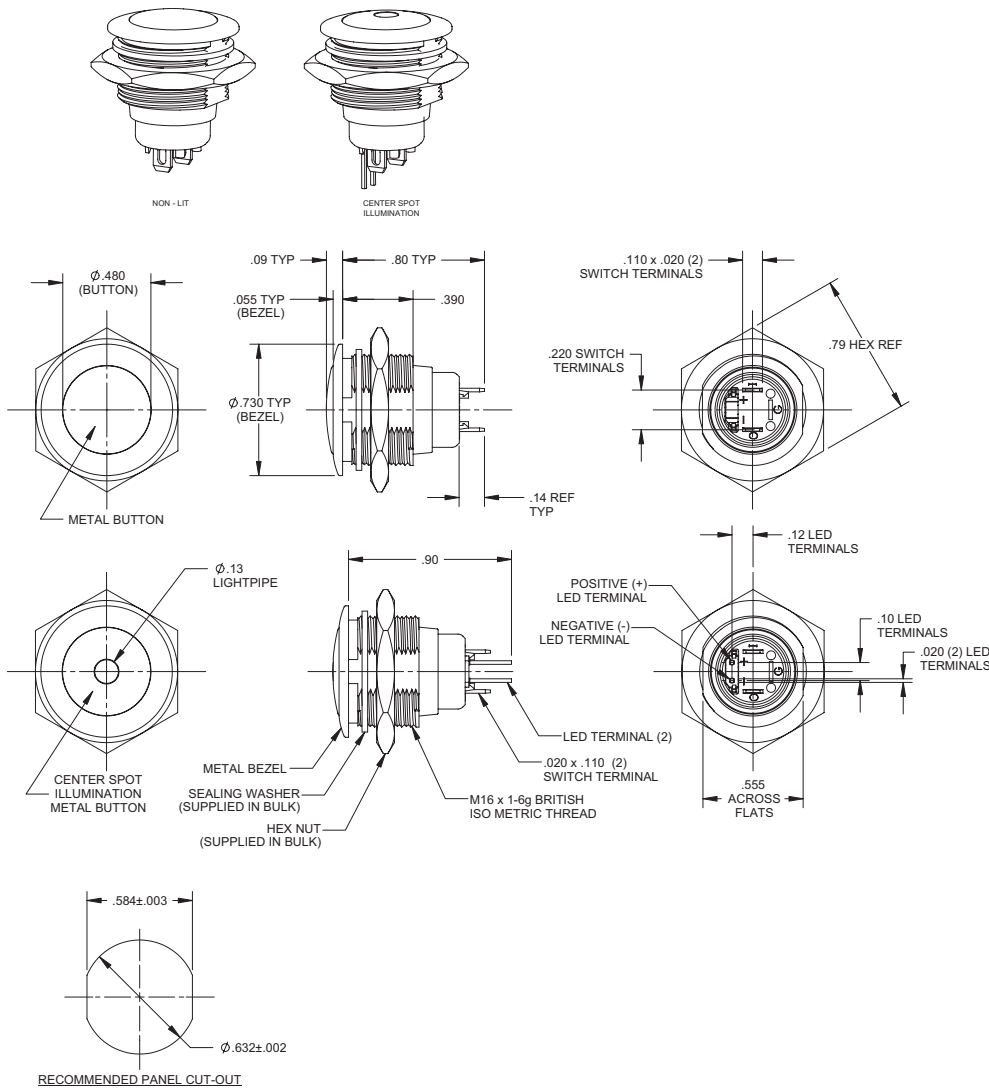
57M-

\* Current limiting resistor is required to limit LED forward current to 20 mA (not included).

### STANDARDS / AGENCY / RATINGS:



PRODUCT DRAWINGS



MECHANICAL / ELECTRICAL CHARACTERISTICS:

- Circuit:**  
SPST-NO-DB
- Button travel (nominal):**  
0.09 inches / 2.3 mm
- Operating force (nominal):**  
3N / 306g
- Contact bounce (nominal):**  
1 millisecond
- Panel thickness:**  
0.20 – 0.120 inches /  
0.5 – 3mm
- Temperature index:**  
-40°C to + 85°C
- Torque (max):**  
10 inch pounds
- LED operating temperature:**  
-13° F to +185° F /  
-25° C to +85° C
- Current ratings (resistive):**  
250mA @ 12VDC, 100K cycles  
150mA @ 28VDC, 150K cycles  
(momentary)  
100mA @ 48VDC, 100K cycles  
10mA @ 12VDC, 1 million cycles  
(momentary)

ELECTRO-MECHANICAL

- Dielectric strength:**  
1,000 VAC
- Insulation resistance:**  
1 GΩ
- Contact resistance:**  
50 mΩ max (initial)

PANEL MOUNTING AND CONSTRUCTION INFORMATION

The series 57M mounts easily into panels of minimum 0.20" (0.5mm) and maximum 0.120" (3mm) thicknesses. Front panel sealing to IP67 is achieved by a sealing washer which is fitted to the body of the switch before it is inserted into the panel hole cutout. It is held onto the panel by means of a metal hex nut tightened down to a torque of 10 inch pounds to achieve the correct sealing pressure.