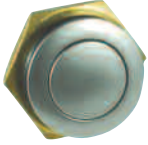


SERIES 57M-EM:



ACTUAL SIZE



MINIATURE PANEL SEALED METAL PUSHBUTTON SWITCHES

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.

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

APPLICATIONS

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

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, BLACK CHROME PLATED

ILLUMINATION:

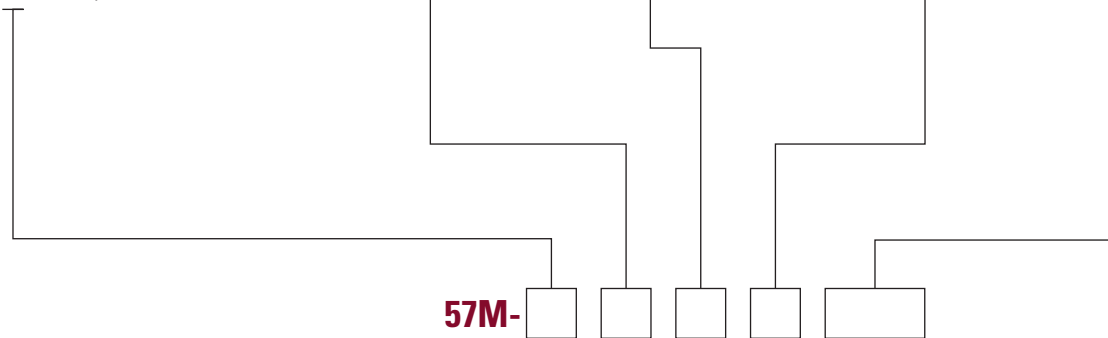
0. NON-LIT
1. CENTER SPOT ILLUMINATION
2. RING ILLUMINATION
3. STANBY LOGO ILLUMINATION

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

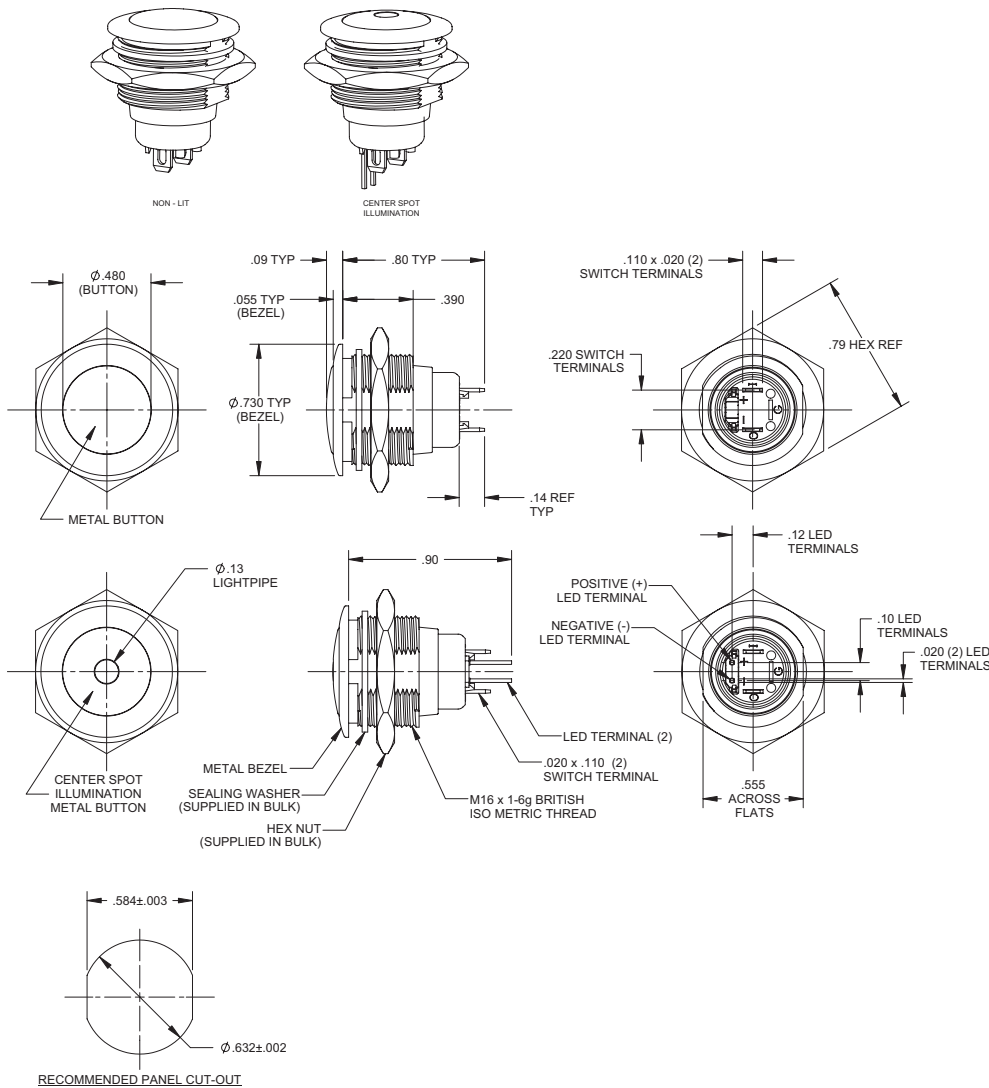


* Current limiting resistor is required to limit LED forward current to 20 mA (not included).

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

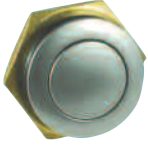
Contact resistance:

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 brass hex nut tightened down to a torque of 10 inch pounds to achieve the correct sealing pressure.

SERIES 57M-SS:



ACTUAL SIZE



MINIATURE PANEL SEALED METAL PUSHBUTTON SWITCHES

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, solid-state operation with Gold plated contacts and solder terminals. It is ideal for a multitude of applications.

KEY FEATURES:

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

APPLICATIONS

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

ORDERING INFORMATION:

SWITCH FUNCTION:

- 3. SOLID STATE, MOMENTARY, SOLDER TERMINAL
- 4. SOLID STATE, MAINTAINED, SOLDER TERMINAL
- 7. SOLID STATE, MOMENTARY, PC TERMINAL
- 8. SOLID STATE, MAINTAINED, PC TERMINAL
- C. SOLID STATE, , MOMENTARY, WIRE LEADS
- D. SOLID STATE, , MAINTAINED, WIRE LEADS
- 9. SPECIAL, DIGITS ARE IN SERIAL ORDER

HOUSING MATERIAL:

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

BUTTON STYLE:

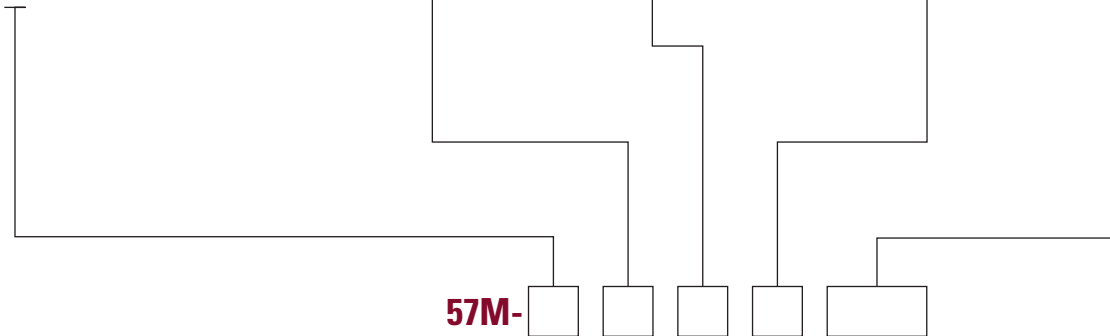
- 0. NON-LIT
- 1. CENTER SPOT ILLUMINATION
- 2. RING ILLUMINATION
- 3. STANBY LOGO ILLUMINATION

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

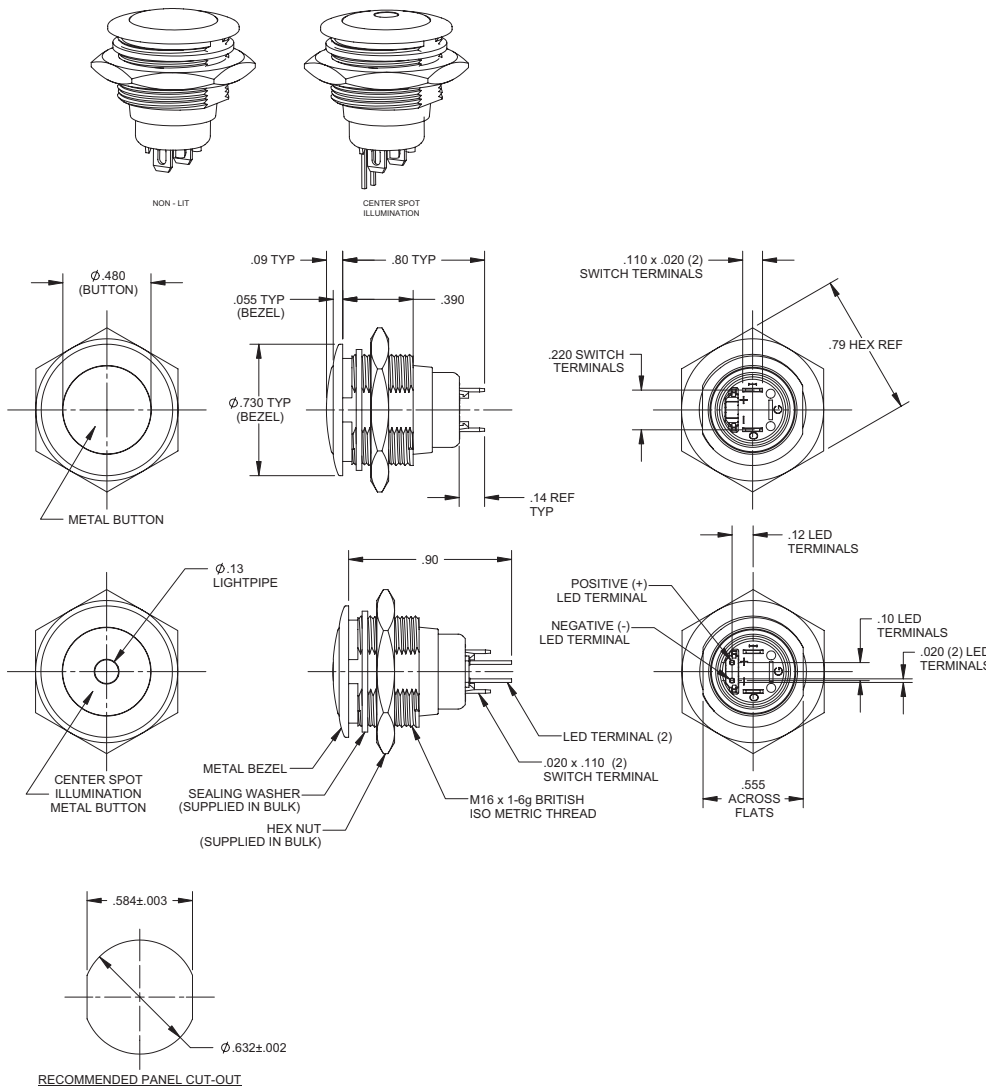


* Current limiting resistor is required to limit LED forward current to 20 mA (not included).

STANDARDS / AGENCY / RATINGS:



PRODUCT DRAWINGS



MECHANICAL / ELECTRICAL CHARACTERISTICS:

Circuit:

SPST-NO

Button travel (nominal):

0.09 inches / 2.3 mm

Life (mechanical) (nominal):

1,000,000 cycles (momentary)

100,000 cycles (maintained)

Operating force (nominal):

3N / 306 grams

Panel thickness:

0.02 – 0.12 inches / 0.5 – 3mm

Temperature index:

-40°F to +185°F

LED operating temperature:

-13° F to +185° F /

-25° C to +85° C

Supply voltage:

4.2V to 24V, 26.5V Max.

Supply current:

B<Brp, Vcc=12V: 3mA Typ.

To 8mA Max.

B>Bop, Vcc=12V: 4mA Typ.

To 8mA Max.

Output current:

20 mA

Reverse battery voltage:

-30V Max.

Reverse output current:

-50mA Max.

Torque (max):

10 inch pounds

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 brass hex nut tightened down to a torque of 10 inch pounds to achieve the correct sealing pressure.