# **The Switches**

## SERIES 57M

## *www.itwswitches.com* 800.544.3354



## **Miniature Panel Sealed Metal Pushbutton Switches**

The 57M is a miniature, rugged vandal resistant switch. The housing is zinc alloy with velour chrome plating. It is available as maintained or momentary action, Electro-mechanical or solid-state, with PC or 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 or Solid-State (Hall Effect)

## **Applications**

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

### **O**RDERING **INFORMATION**:

Switch Function:	HOUSING MATERIAL:	Illumination:	LED COLOR:
1. Mechanical, Momentary, Solder Terminal	1. ZINC ALLOY, VELOUR	0. Non-lit	N. None
2. Mechanical, Maintained, Solder Terminal	CHROME PLATED	1. Center Spot Illumination	G. GREEN L.E.D.
3. Solid State, Momentary, Solder Terminal		T	R. RED L.E.D.
4. Solid State, Maintained, Solder Terminal			A. Amber L.E.D.
5. Mechanical, Momentary, P.C. Terminal			B. BLUE L.E.D.
6. Mechanical, Maintained, P.C. Terminal			W. WHITE L.E.D.
7. Solid State, Momentary, P.C. Terminal			T
8. Solid State, Maintained, P.C. Terminal			
9. Special, Following digits are in serial order			
	<b>57M-</b>		

RoHS COMPLIANT 2002/95/EC

## STANDARDS / AGENCY / RATINGS:



## Series 57M—Miniature Panel Sealed Metal Pushbutton















## **PANEL MOUNTING AND CONSTRUCTION INFORMATION**

The series 57M mounts easily into panels of minimum 0.03"(0.8mm) and maximum 0.118" (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.



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### MECHANICAL / ELECTRICAL CHARACTERISTICS:

### Circuit:

SPST-NO-DB

Button travel (nominal): 0.09" / 2.3 mm

Life (mechanical): 500,000 cycles max (momentary) 100,000 cycles max (maintained)

**Operating force (nominal):** 3N/306g

**Contact bounce (nominal:** 1 ms

Panel thickness: 0.03" - 0.118" (0.8 - 3mm)

**Temperature index:** -40°C to + 85°C

**Torque (max):** 10 inch pounds

#### **ELECTRO-MECHANICAL**

Current ratings: 400mA, 32 VAC Res.

100 mA, 50 VDC Res. 125mA, 125 VAC Res.

**Dielectric strength:** 1,000 VAC

**Insulation resistance:** 1G OHM

**Contact resistance:** 50m OHMS max (initial)

### **SOLID-STATE (HALL-EFFECT)**

Supply voltage: 4.2V to 24V, 26.5 Max.

Supply current: B<Brp, Vcc=12V: 3mA Typ. To 8mA Max. B>Bop, Vcc=12V: 4mA Typ. To 8mA Max.

Output current: 30 to 50 mA

Reverse battery voltage: -30V Max.

**Reverse battery current:** -5V Max.