

## ELECTRO-MECHANICAL MINIATURE SEALED

### SERIES 48EM:



ACTUAL SIZE



### FLEX-TECH MINIATURE SEALED PUSHBUTTON SWITCHES

This rugged multi-option sealed pushbutton series offers the utmost in choices of mounting styles, colors, terminations, bezels, lighting and momentary or alternate-action switching. The Series 48 offers all these options in one compact package size.

#### KEY FEATURES:

- Momentary or maintained action
- Gold contacts
- Many button colors
- Choice of LED colors (or non-lighted versions)
- Long life
- Solder or PC terminals
- Panel sealed to IP 67

### APPLICATIONS

- Office equipment
- Medical equipment
- Industrial machinery
- Outdoor controls
- Mass transportation
- Food processing equipment

### ORDERING INFORMATION:

Switch Function	Switch Termination	Module Type	Bezel Type	LED Color	Button Color	Mounting Type	Voltage Resistor
Momentary	Solder Tabs	<b>48-1</b>	<b>RB</b> - Round, Black	<b>N</b> - None	<b>RD</b> - Red	<b>B</b> - Bushing	If Blank*
Maintained	Solder Tabs	<b>48-2</b>	<b>SB</b> - Square, Black	<b>R</b> - Red	<b>GR</b> - Green	<b>S</b> - Snap-fit	<b>05</b> - 5V forward
Momentary	PC	<b>48-5</b>	<b>RC</b> - Round, Chrome	<b>G</b> - Green	<b>BK</b> - Black		
Maintained	PC	<b>48-6</b>	<b>SC</b> - Square, Chrome	<b>Y</b> - Yellow	<b>BL</b> - Blue		
Momentary	Wire Leads	<b>48-A</b>		<b>A</b> - Amber	<b>YL</b> - Yellow		
Maintained	Wire Leads	<b>48-B</b>		<b>B</b> - Blue	<b>OR</b> - Orange		
				<b>W</b> - White	<b>CR</b> - Chrome		
					<b>PK</b> - Black with Standby Symbol		
					<b>WH</b> - White		

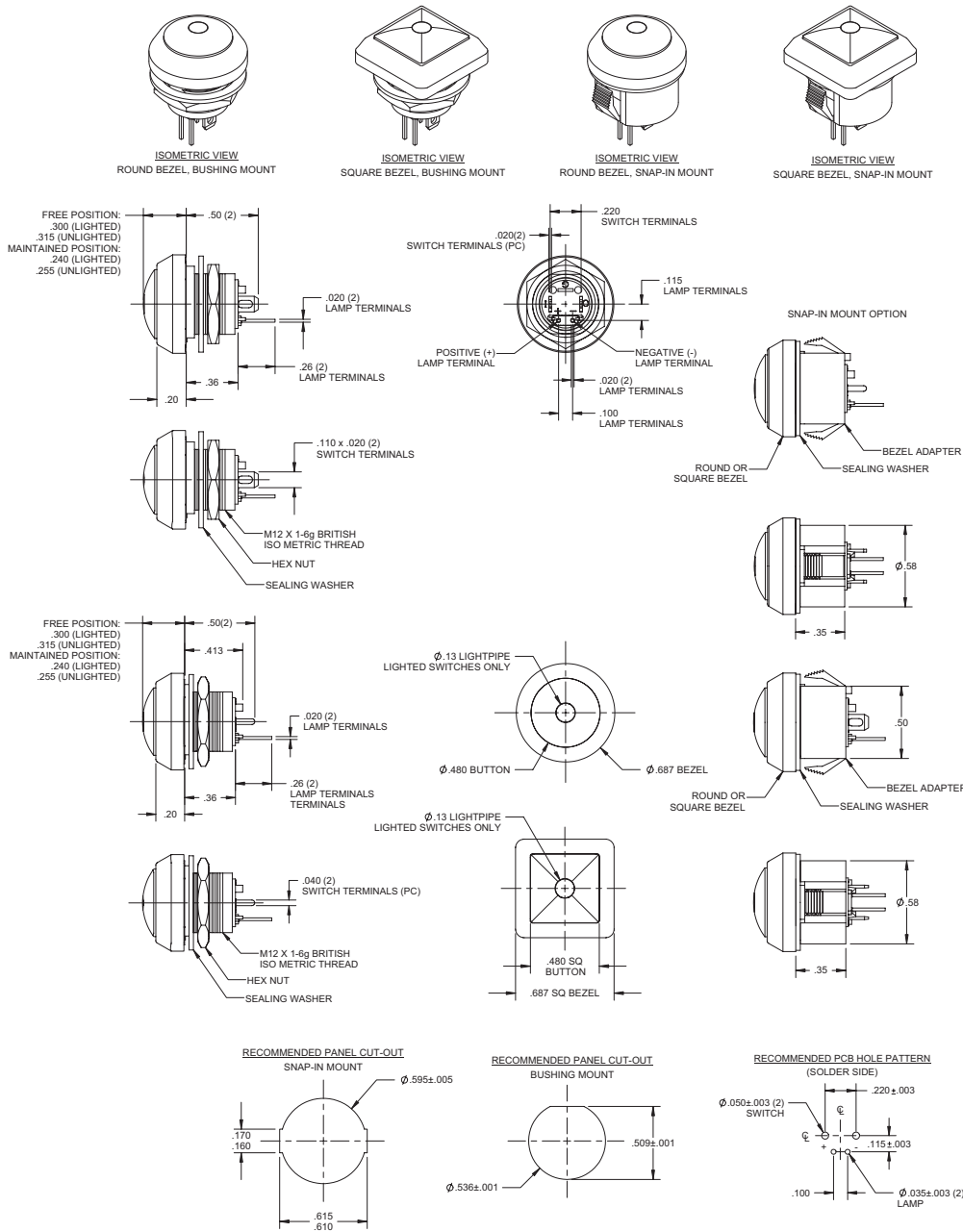
\* Current limiting resistor is required to limit LED forward current to 20 mA (not included).

### STANDARDS / AGENCY / RATINGS:



# SERIES 48: ELECTRO-MECHANICAL MINIATURE SEALED

## PRODUCT DRAWINGS



## MECHANICAL / ELECTRICAL CHARACTERISTICS:

- Circuit:** SPST-NO-DB
- Button travel (nominal):** 0.09 inches / 2.3 mm
- Operating force (nominal):** 3N / 306 grams
- Contact bounce (nominal):** 1 millisecond
- 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
- Current ratings (resistive):**
  - 250mA @ 12VDC, 100K cycles
  - 150mA @ 28VDC, 150K cycles (momentary)
  - 100mA @ 48VDC, 100K cycles
  - 10mA @ 12VDC, 1 million cycles (momentary)
- Dielectric strength:** 1,000 VAC
- Insulation resistance:** 1G OHM
- Contact resistance:** 50 mΩ max (initial)
- Torque (max):** 10 inch pounds