

# MINIATURE POSITIVE ACTION SWITCHES



Series - 8866-8869

MIL-DTL-8834 Miniature Positive Action Switches  
Solder Lug Terminals

FEATURES		SPECIFICATIONS		CURRENT RATINGS							
<ul style="list-style-type: none"> <li>Sealed bushing</li> <li>Current rating versatility</li> <li>1 and 2 pole circuitry</li> <li>Non-teasible mechanism for all but center "ON" circuits</li> <li>Dry circuit (logic level loads) to power switching levels</li> <li>Wiping action contacts</li> <li>Positive make and break action</li> <li>Small and large size bushings and Actuator</li> <li>Solder lug terminals</li> <li>Also available with locking Actuator, integrated wire termination and printed circuit board terminals.</li> </ul>		<ul style="list-style-type: none"> <li>Bushing seal or bonded seal per MIL-DTL-8834</li> <li>MS approved and QPL'd to MIL-DTL-8834</li> <li>Temperature range: -67°F to +160°F (-55°C to +71°C)</li> <li>Life: 20,000 operations at rated load 40,000 operations mechanical life</li> <li>"O" ring panel seal on ¼" - 40 type bushing size</li> <li>Solder lug terminals .050 [1,27] dia. hole</li> </ul>		28VDC (Amperes per pole)		115VAC 60Hz and 400Hz (Amperes per pole)					
				Resistive Load		Inductive Load		Resistive Load		Inductive Load	
				28VDC		28VDC		60Hz 400Hz		60Hz 400Hz	
		No. of Poles	Catalog Number	Type of Operation							
		1	8866 8868	Maintained and Momentary	5	1	2	3	1	2	
		2	8867 8869	Maintained and Momentary	5	1	2	3	1	2	

Minimum Rating: 25 microamperes at 5 millivolts.

## SELECTION TABLE

CIRCUIT WITH LEVER IN . . .					
	Up Position	Center Position	Down Position (Keyway)	Military Part Number	Catalog Number ②
 <p><b>8866</b></p>	<b>ONE POLE</b>				
	ON	OFF	ON	MS24655-211	8866K1
	ON	NONE	OFF	-221	K7
	ON	NONE	ON	-231	K4
	ON	OFF	NONE	-241	K5
	* ON	OFF	ON*	MS24655-271	8866K2
	NONE	OFF	ON*	-281	K6
	ON	OFF	ON*	-311	K3
NONE	ON	ON*	321	K8⓪	
 <p><b>8867</b></p>	<b>TWO POLE</b>				
	ON	OFF	ON	MS24656-211	8867K1
	ON	NONE	OFF	-221	K7
	ON	NONE	ON	-231	K4
	ON	OFF	NONE	-241	K5
	* ON	OFF	ON*	MS24656-271	8867K2
	NONE	OFF	ON*	-281	K6
	ON	OFF	ON*	-311	K3
	NONE	ON	ON*	MS24656-321	8867K8 ⓪
	ON	ON	ON	-331	K9 ⓪
	ON	ON	ON*	-351	K10⓪
* ON	ON	ON*	-341	K11⓪	

**\* Momentary contact.**

See page A75 for special circuit diagrams.

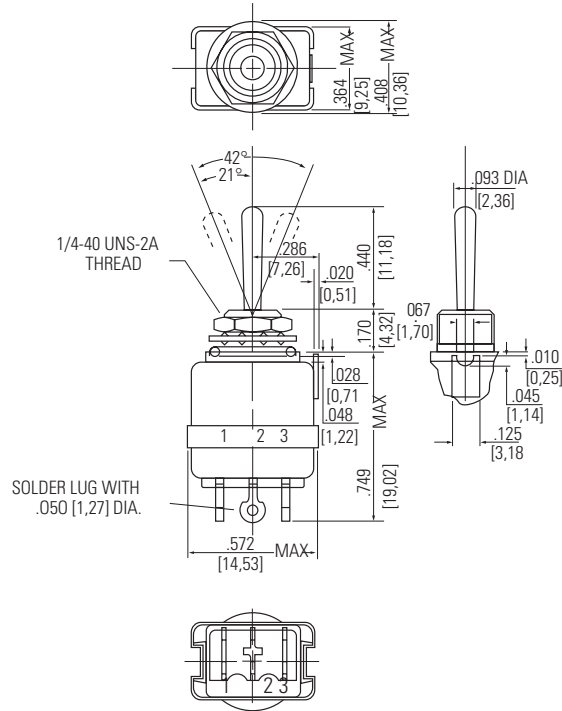
① Dielectric per MIL-DTL-8834 except limited to 1250 volts. Delayed action of the switch toggle lever may cause circuit to close or open before snap action mechanism trips.

② Caution should be exercised during soldering and flux removal. See page A56 for details.

Series - 8866-8869

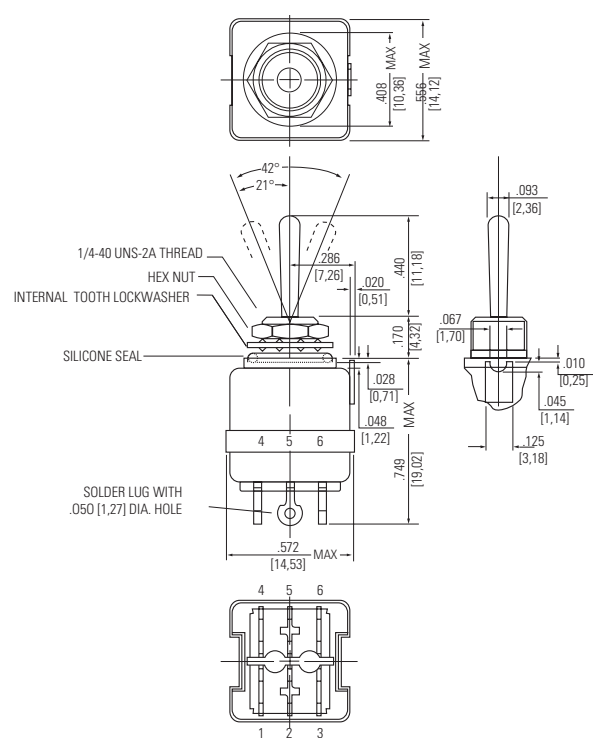
MINIATURE POSITIVE ACTION SWITCHES  
MIL-DTL-8834 Miniature Positive Action Switches  
Solder Lug Terminals

MOUNTING DIMENSIONS - ONE POLE / 8866



Terminal Identification

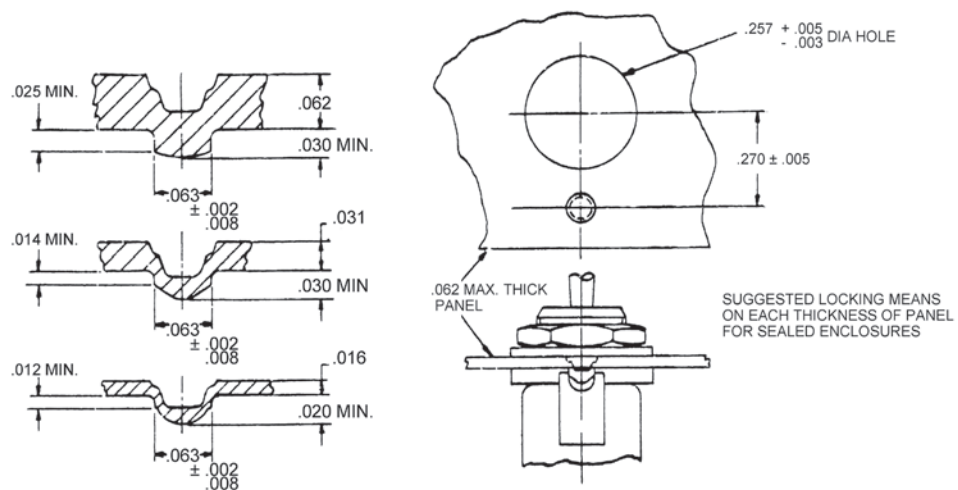
MOUNTING DIMENSIONS - TWO POLE / 8867



Terminal Identification

Non-functional terminals not supplied.

PANEL CUTOUT DIMENSIONS



**STANDARD**  
0.00 = inches  
[0,0] = mm






Mounting dimensions for reference only.

# MINIATURE POSITIVE ACTION SWITCHES

Series - 8866-8869

MIL-DTL-8834 Miniature Positive Action Switches  
Solder Lug Terminals

## SELECTION TABLE

		CIRCUIT WITH LEVER IN . . .						
		Up Position	Center Position	Down Position (Keyway)	MS Part Number	Catalog Number ②	MS Part Number ③	Catalog Number ②
								
<b>8868</b>		<b>ONE POLE</b>						
		ON	OFF	ON	MS90310-211	8868K1	Feature Not Available in Single Pole Switches	
		ON	NONE	OFF	-221	K7		
		ON	NONE	ON	-231	K4		
		ON	OFF	NONE	-241	K5		
		* ON	OFF	ON*	MS90310-271	8868K2		
		NONE	OFF	ON*	-281	K6		
		ON	OFF	ON*	-311	K3		
		NONE	ON	ON*	MS21351-321	K8①		
		<b>8869</b>		<b>TWO POLE</b>				
ON	OFF			ON	MS90311-211	8869K1	MS90311-711	8869K1X
ON	NONE			OFF	-221	K7	-721	K7X
ON	NONE			ON	-231	K4	-731	K4X
ON	OFF			NONE	-241	K5	-741	K5X
* ON	OFF			ON*	MS90311-271	8869K2	MS90311-771	8869K2X
NONE	OFF			ON*	-281	K6	-781	K6X
ON	OFF			ON*	-311	K3	-811	K3X
NONE	ON			ON*	MS21353-321	8869K8 ①	MS21353-821	8869K8X①
ON	ON			ON	-331	K9 ①	-831	K9X①
ON	ON			ON*	-351	K10 ①	-851	K10X①
* ON	ON			ON*	-341	K11 ①	-841	K11X①

\* **Momentary contact.**

① Dielectric per MIL-DTL-8834 except limited to 1250 volts. Delayed action of the switch toggle lever may cause circuit to close or open before snap action mechanism trips.

② Caution should be exercised during soldering and flux removal. See page A56 for details.

③ Furnished with Bonded Seal Feature. (Meets 15' water sealing level requirements.)

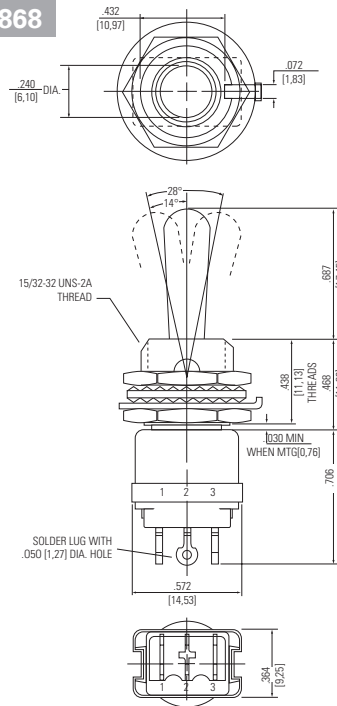
Series - 8866-8869

# MINIATURE POSITIVE ACTION SWITCHES

## MIL-DTL-8834 Miniature Positive Action Switches

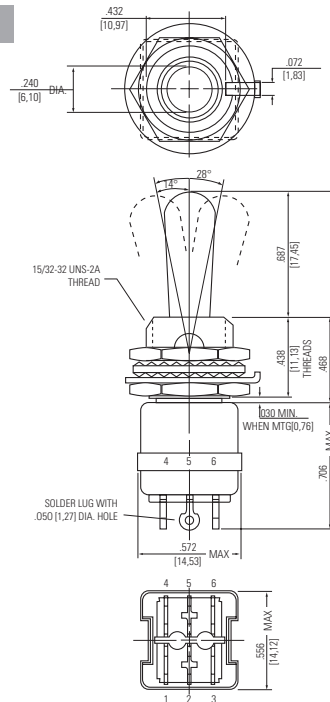
### Solder Lug Terminals

#### MOUNTING DIMENSIONS - ONE POLE / 8868



#### Terminal Identification

#### MOUNTING DIMENSIONS - TWO POLE / 8869



#### Terminal Identification

**STANDARD**  
0.00 = inches  
[0,0] = mm

Mounting dimensions for reference only.

Non-functional terminals not supplied.

# MINIATURE POSITIVE ACTION SWITCHES

Series - 8866-8869

MIL-DTL-8834 Miniature Positive Action Switches

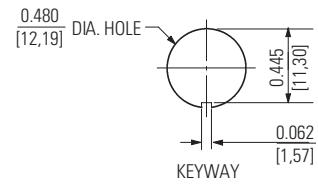
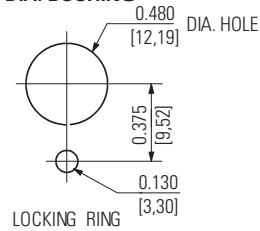
Solder Lug Terminals

## OPTIONS/ACCESSORIES

- Special mounting hardware
- Special marking
- Mounting hardware furnished assembled
- Panel seal, Part Number 32-341
- Lever extensions and attachable tips
- Special circuits
- Special bushing and lever plating
- Mounting adapter nuts
- Custom wire harnesses
- EMI/RFI capability on two pole (large bushing)
- Gold plated contacts

## PANEL CUTOUT DIMENSIONS

### 15/32 DIA. BUSHING



**STANDARD**  
0.00 = inches  
[0,0] = mm

Mounting dimensions for reference only.

See page A56 for soldering and cleaning recommendations.