

# MCPA Series

## Sub-Miniature Pushbutton Switches



### Specification:

#### Max. Current/Voltage Rating With Resistive Load:

MCPAS6 400mA 32V AC-100mA 50V DC-125mA 125V AC  
500mA 48V AC - 200 mA 50V DC - 200mA 250V AC

Initial Contact Resistance : 50mΩ Max.  
Insulation Resistance : 1GΩ Min. at 500V DC  
Operating Temperature : -30°C to +85°C  
Dielectric Strength : 1,000 V AC rms  
: 1,500 V AC rms. for metal material

#### Electrical Life at Full Load:

MCPAS6 : 500,000 cycles

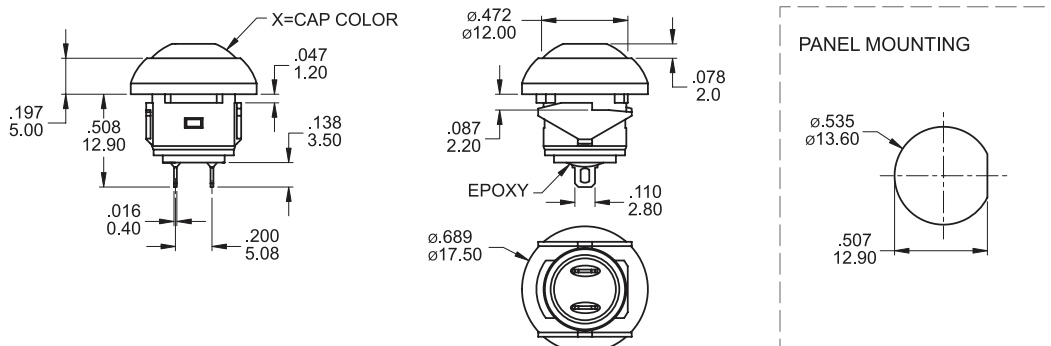
#### Panel Thickness:

MCPAS6-B1 series : 0.8 mm (.031) Min. -1.8 mm (.071) Max  
MCPAS6-B2 series : 1.5 mm (.059) Min. -4 mm (.157) Max

#### Total Travel:

MCPAS6 : 1.5mm (0.59)  
Operating Force : 2N to 5N  
Contact Bounce : 10ms  
Mechanical Life : 1,000,000 Cycles  
Torque : 0.5Nm Max. applied to nut, 1.5Nm Max. For Metal Material  
Soldering : 350°C Max. for 5 seconds

### MCPAS6-B1-M1CES



SPST

Dimensions : Inches (Millimetres)

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[www.farnell.com](http://www.farnell.com)  
[www.newark.com](http://www.newark.com)

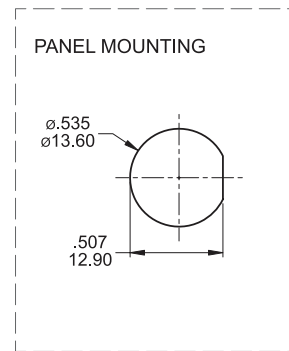
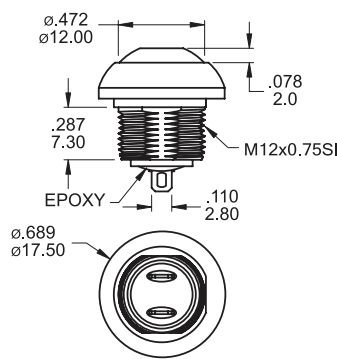
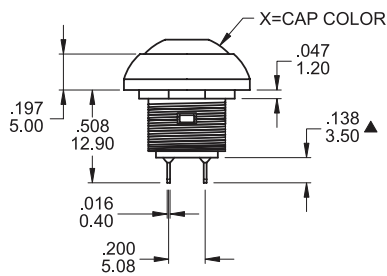


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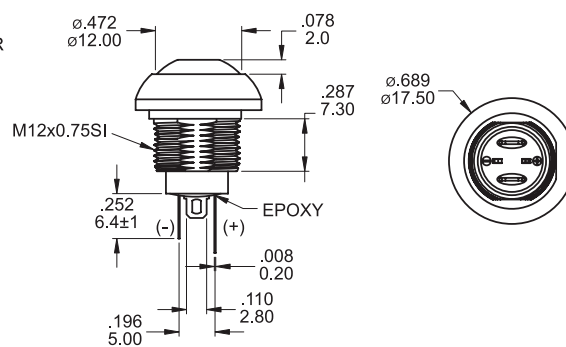
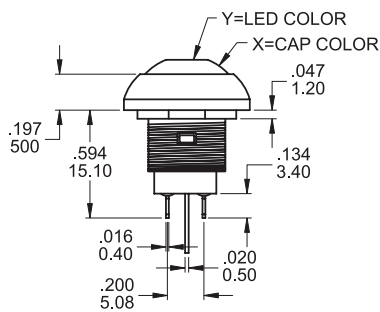
### MCPAS6-B2-M1CES



SPST

Dimensions : Inches (Millimetres)

### MCPAS6-B2-M1CES



SPST

Dimensions : Inches (Millimetres)

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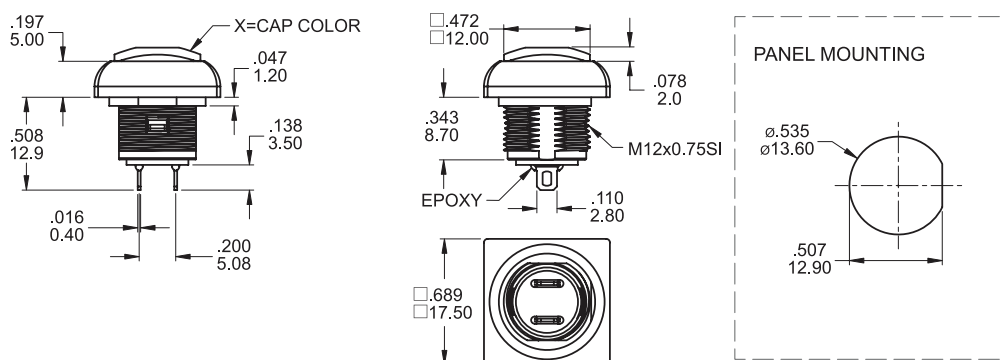


# MCPA Series

## Sub-Miniature Pushbutton Switches



### MCPAS6-D1-M1CES



SPST

Dimensions : Inches (Millimetres)

### Switch Function

No. Poles	Model No.	Switch Function		Connected terminals		Schematic
		Pos.1	Pos.2	Pos.1	Pos.2	
SP	MCPAS6					
		Off	MOM	Open	1-3	

MOM=MOMENTARY

### Soldering Processes:

Manual Soldering

: Use soldering iron of 30 watts, controlled at 350°C approximately 5 seconds while applying solder.

Wave Soldering:

Recommended Soldering Temperature

: 260 ± 5°C

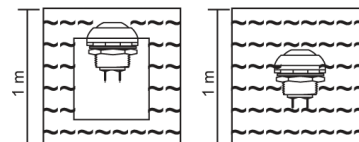
Duration of Solder Immersion

: Max 5 sec.

(PCB is 1.6mm in thickness)

IP 67 for the whole series:

Protected against the effects of immersion up to 1m water (30mm)

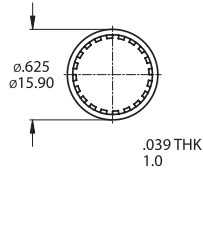
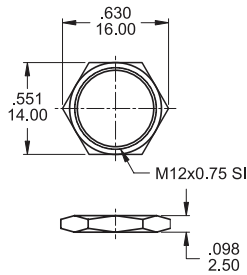


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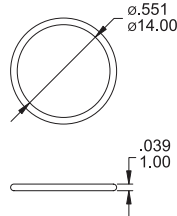
## Sub-Miniature Pushbutton Switches



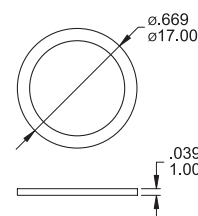
### Hardware:



Supplied with B2 / D1 bushing



Supplied with PAL6 and D1 options



Supplied standard with B1 / B2 options

Dimensions : Inches (Millimetres)

### With LED Electro-Optical Data:

Model No.	Lens Appearance	Colour	Electro-optical Data (at 20mA)				Peak Wavelength	Viewing Angle 2/ 1/2 (deg)	
			Vf (V)		Iv (mcd)				
			Typ.	Max.	Typ.	Min.			
MCPAS6	Water Clear	Super White	2.8	3.3	200	100	X / Y=0.27	35°	
		Super Red	2	2.5	700	200	645		
		Yellow	2.1	2.6	100	55	589		
		Green	2.2	2.7	130	70	565		
		Super Blue	3.1	3.6	580	250	460		
		Super Yellow ( Super Green )	Y	2	2.6	475	210		590
			G	2	2.6	210	140		570
		Super Yellow ( Super Blue )	Y	2.1	2.6	200	94		590
			B	3.2	3.6	200	94		460
		Super Yellow ( Super Red )	Y	2.1	2.6	100	63		590
			R	2	2.6	90	42		630
		Super Red ( Super Green )	R	2	2.6	90	42		630
			G	2	2.6	90	42		570
		Super Red ( Super Blue )	R	2	2.6	90	42		630
			B	3.2	3.6	200	94		460
Super Green ( Super Blue )	G	2	2.6	100	42	570			
	B	3.2	3.6	200	94	460			



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### Part Number Table

Description	Part Number
Switch, Round, Illum, Red	MCPAS6-B1-M1CES2-5L3
Switch, Round, Illum Dot, Yellow	MCPAS6-B1-M1CES2-5L5
Switch, Round, Illum Dot, Green	MCPAS6-B1-M1CES2-5L6
Switch, Round, Illum Dot, Blue	MCPAS6-B1-M1CES2-5L7
Switch, Round, Illum Dot, Red	MCPAS6-B2-M1CES2-5L3
Switch, Round, Illum Dot, Yellow	MCPAS6-B2-M1CES2-5L5
Switch, Round, Illum Dot, Green	MCPAS6-B2-M1CES2-5L6
Switch, Round, Illum Dot, Blue	MCPAS6-B2-M1CES2-5L7
Switch, Square, White	MCPAS6-D1-M1CES1-5
Switch, Square, Black	MCPAS6-D1-M1CES2-5
Switch, Square, Red	MCPAS6-D1-M1CES3-5
Switch, Square, Yellow	MCPAS6-D1-M1CES5-5
Switch, Square, Green	MCPAS6-D1-M1CES6-5
Switch, Square, Blue	MCPAS6-D1-M1CES7-5

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