

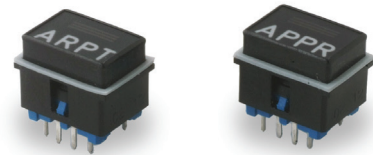


### Features/Benefits

- Illuminated display
- Small size
- Cold lighting
- Tactile feed back

### Typical Applications

- Avionic



### Mechanical

ACTUATION FORCE: 5,5 N ± 0,5 N  
 MAXIMUM FORCE: 80 N  
 TRAVEL TO CONTACT: 1,2 ± 0,1 mm  
 OVERTRAVEL: >0,3 mm  
 TOTAL TRAVEL: 1,5 ± 0,1 mm  
 LIFE EXPECTANCY: 10<sup>6</sup> operations 28 V - 10 mA  
 WEIGHT: 2 grams  
 VIBRATION: ± 0,45mm from 33 Hz to 75 Hz  
 ACCELERATION: 10 g max

### Electrical

CONTACTS: Gold plated  
 VOLTAGE: Max 100 V - Min 20 mV DC  
 CARRYING CURRENT: Max 250 mA - Min 50 µA  
 SWITCHING CURRENT: Max 50 mA - Min 50 µA  
 MAX SWITCHING POWER: 1 W  
 CONTACT RESISTANCE: < 50 Ω  
 DIELECTRIC STRENGTH: 500 V rms  
 INSULATION RESISTANCE (100 V): > 5000 M Ω  
 BOUNCE: < 3 ms  
 SWITCHING OF 2 POLES MATCHING: < 10 ms

### Environmental Data

STORAGE TEMPERATURE: -55°C TO 85°C  
 OPERATING TEMPERATURE: -30°C TO 85°C  
 TEMPERATURE OF KEY TO CAP: < Ambient +25°C  
 HUMIDITY TEST: 21 days (-40°C - 93% HR)  
 ALTITUDE PRESSURE: From 20 hPa to 1070 hPa

### Soldering Data

MANUAL SOLDERING: 250°C / 2s  
 SEALING: According to IP64

### Plastic Material

Housing and Cap: UL-94 V0

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, please contact Customer Service.

### Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box.

**Designation** \_\_\_\_\_

**PBA** PBA Series

**Size**

1 9,5 x 14

2 11,5 x 14

3 14 x 14

**Marking Location**

H High

M Middle

L Low

**Type of Marking**

T Text / Legend

S Status Indicator

**LED Color**

0 White λ

1 Green λ 560 nm

2 Yellow Green λ 568 nm

3 Amber λ 590 nm

4 Red λ 660 nm

5 Other λ

**P B A** [ ] [ ] [ ] [ ] [ ] **Repeat sequence for 2nd Marking** [ ] [ ] [ ] [ ] [ ]

**LED Supply or Type**

AC Alternative

DC Direct

XX for each marking

1:6 LEDs in parallel for direct current

**Display Type**

		LED Non-Illuminated	LED Illuminated
<b>N</b>	Text Marking	White	LED Color
	Background	Black	Black
<b>S</b>	Text Marking	Not visible	LED Color
	Background	Black	Black
<b>R</b>	Text Marking	White	LED Color
	Background	Red	Red
<b>G</b>	Text Marking	Green	Green
	Background	Black	Black



# PBA Series Illuminated Pushbutton

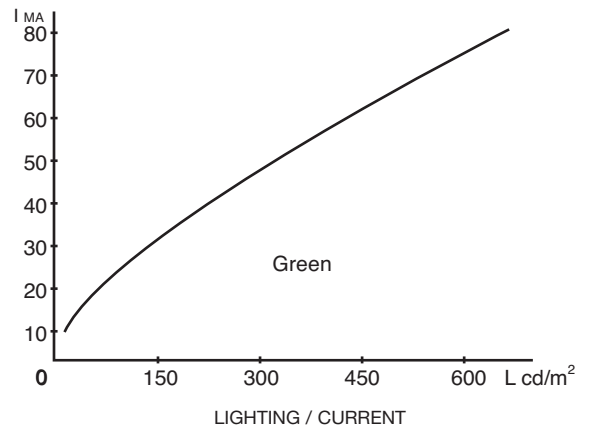
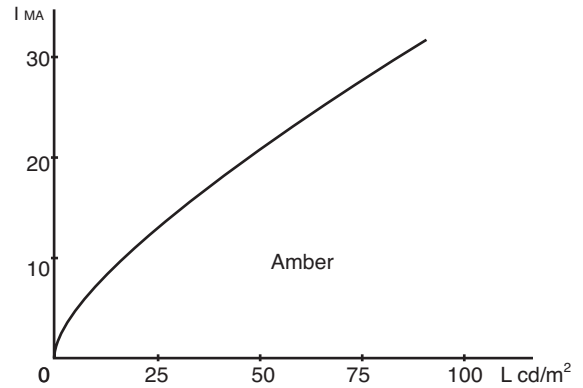
Pushbutton  
A

## LIGHTING DATA

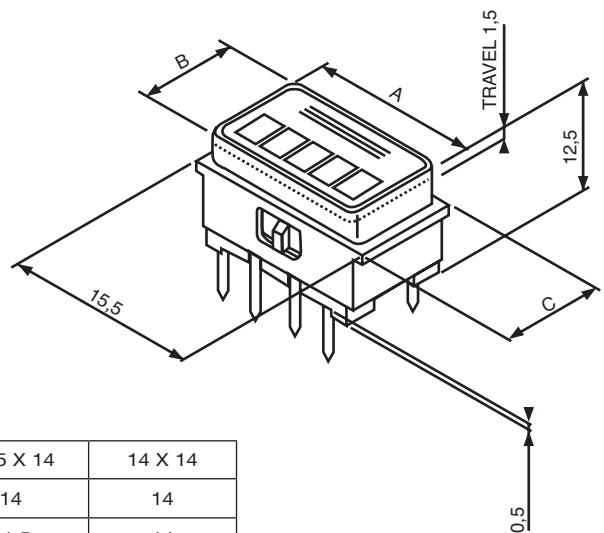
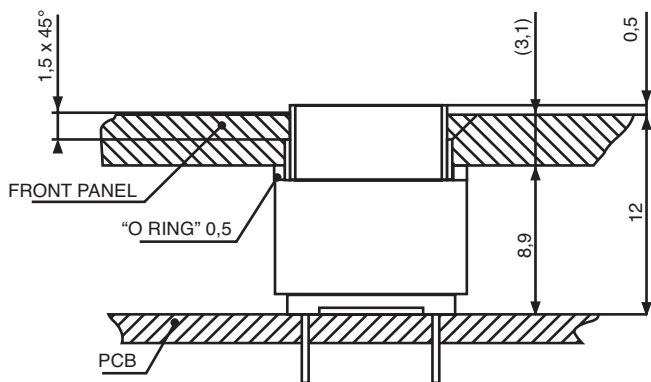
The legends of function and the status indicator can be illuminated separately.

Color		Amber	Green
Wave Length		586 < $\lambda$ < 592	555 < $\lambda$ < 560
Current Max		80 mA	80 mA
Chromaticity	X	0,54 < X < 0,58	0,30 < X < 0,40
	Y	0,40 < Y < 0,44	0,6 < Y
Contrast Min.		1,2	0,85

For other colors and displays, please contact Customer Service.



## DIMENSIONS (applicable for any size)

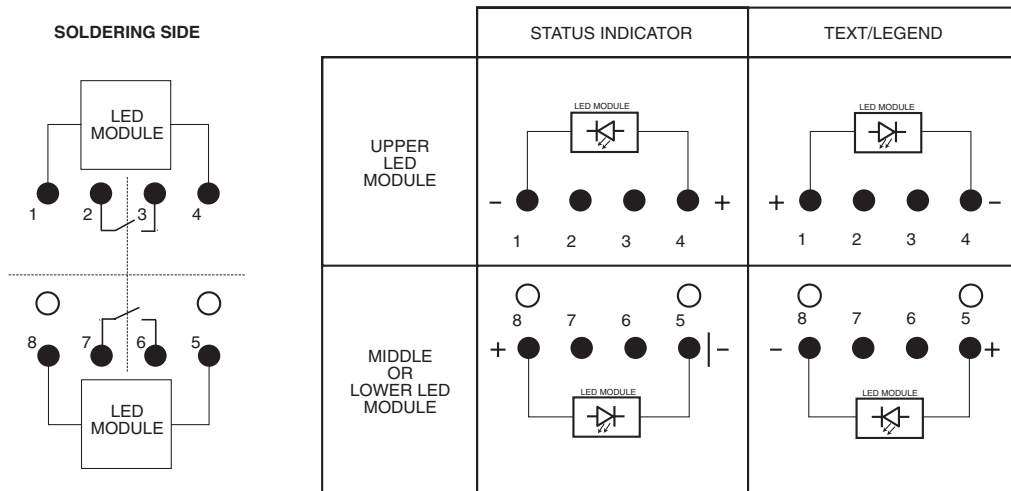


Tolerance:  $\pm 0,1$  mm

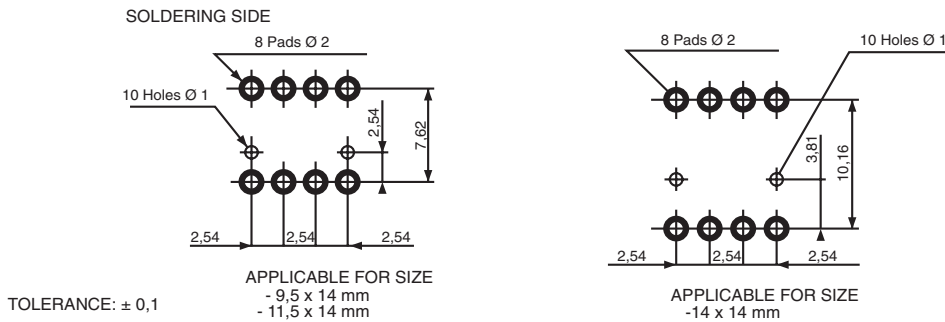
	9,5 X 14	11,5 X 14	14 X 14
A	14	14	14
B	9,5	11,5	14
C	11	11,5	15,5



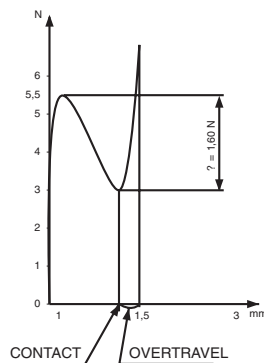
### LED MODULE LAYOUT



### PCB Layout



### TACTILE EFFECT



- TRAVEL**
- TRAVEL TO CONTACT: 1,2 ± 0,1 mm
  - OVERTRAVEL: > 0,3 mm
  - TOTAL TRAVEL: 1,5 ± 0,1 mm

- FORCE**
- ACTUATOR FORCE: 5,5 N ± 0,5 N
  - TACTILE FEELING: 1,6 N

1 or 2 markings are available in any combination of text / legend or status indicator.

