

# 8600 Series Microminiature Pushbutton Switches

## Features/Benefits

- Available with overtravel
- Normally closed models available
- Microminiature size ideal for applications where space is limited
- RoHS compliant

## Typical Applications

- Detection
- Telecommunications and networking equipment
- Computers and peripherals



Models Available

## Specifications

**CONTACT RATING:** Q contact material (8631, 8632 Models): 500 mA @ 120 V AC or 28 V DC; 250 mA @ 250 V AC; (8633 Model): 250 mA @ 120 V AC or 28 V DC; 125 mA @ 250 V AC. See page A-73 for additional ratings.

**ELECTRICAL LIFE:**  
8631 and 8633 MODELS: 250,000 actuations at full load.  
8632 MODEL: 100,000 actuations at full load.

**CONTACT RESISTANCE:** Below 30 mΩ typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

**INSULATION RESISTANCE:** 109 Ω min.

**DIELECTRIC STRENGTH:** 500 Vrms min. @ sea level.

**OPERATING TEMPERATURE:** -30°C to 65°C.

**SOLDERABILITY:** Per MIL-STD-202F method 208D, or EIA RS-186E method 9.

## Materials

**CASE:** Glass filled phenolic or diallyl phthalate (DAP), (UL94V-0).

**PLUNGER:** Glass filled nylon (UL94V-0), black standard.

**BUSHING:** Brass, nickel plated.

**CONTACTS:** Q contact material: Coin silver, silver plated.  
See page A-73 for additional contact materials.

**TERMINALS:**  
8631, 8632 MODELS: Copper alloy, silver plated.  
8633 MODEL: Q contact material: Coin silver.  
See page A-73 for additional contact materials.

**TERMINAL SEAL:**  
8633 MODEL: Epoxy.  
8631, 8632 MODELS: Terminals insert molded.

**HARDWARE:** Nut: Brass, nickel plated.

**NOTE:** Any models supplied with Q, B or G contact material are RoHS compliant.

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

## Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages A-72 and A-73. For additional options not shown in catalog, consult Customer Service Center.

Switch Function

8631 SPST Off-Mom.

8632 SPST Off-Mom.

8633 SPST On-Mom.

Termination

Z Solder lug

C PC Thru-hole

Contact Material

B Gold

Q Silver

G Gold over silver

Seal

D No epoxy

E Epoxy

Plunger Color

2 Black

3 Red



# 8600 Series Microminiature Pushbutton Switches

## SWITCH FUNCTION



Pushbutton  
A

| NO. POLES                                                                 | MODEL NO. | SWITCH FUNCTION |        | TOTAL TRAVEL                                      | ACTUATION FORCE     | SCHEMATIC            |
|---------------------------------------------------------------------------|-----------|-----------------|--------|---------------------------------------------------|---------------------|----------------------|
|                                                                           |           | POS. 1          | POS. 2 |                                                   |                     |                      |
| SP                                                                        | 8631      | OFF             | MOM.   | .040 (1,02) TYP.                                  | 5 oz (140g) TYP.    | N.O.                 |
| <b>SPST</b><br><br>Part number shown: 8631ZQD2<br>Terminals Insert Molded |           |                 |        |                                                   |                     |                      |
| SP                                                                        | 8632      | OFF             | MOM.   | .106 (2,69) TYP. with overtravel .024 (0,61) TYP. | 6.25 oz (177g) TYP. | N.O. with overtravel |
| <b>SPST</b><br><br>Part number shown: 8632ZQD2<br>Terminals Insert Molded |           |                 |        |                                                   |                     |                      |
| SP                                                                        | 8633      | ON              | MOM.   | .048 (1,22) TYP.                                  | 5 oz (140g) TYP.    | N.C.                 |
| <b>SPST</b><br><br>Part number shown: 8633ZQE2                            |           |                 |        |                                                   |                     |                      |

MOM. = Momentary

NOTE: Caps available for plunger options, see page A-73.

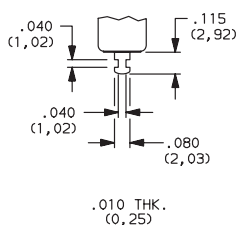
## TERMINATIONS



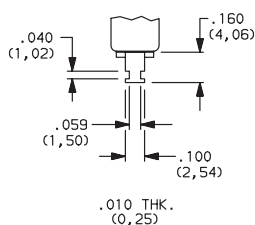
**Z** SOLDER LUG

**C** PC THRU-HOLE

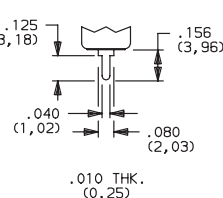
8631, 8632 models only.



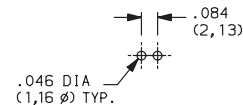
8633 models only.



8631, 8632 models only.



PC MOUNTING



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

**C&K**

# 8600 Series Microminiature Pushbutton Switches



A

Pushbutton

## CONTACT MATERIAL

| OPTION CODE | RoHS COMPLIANT * | RoHS COMPATIBLE * | CONTACT MATERIAL                 | TERMINAL PLATING    | RATINGS                           |                                                                                                                                                                            |
|-------------|------------------|-------------------|----------------------------------|---------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             |                  |                   |                                  |                     |                                   |                                                                                                                                                                            |
| <b>B</b>    | YES              | YES               | GOLD <sup>1</sup>                | GOLD <sup>1</sup>   | LOW LEVEL/<br>DRY CIRCUIT         | 0.4 VA MAX. @ 20 V AC OR DC MAX.                                                                                                                                           |
| <b>Q</b>    | YES              | YES               | SILVER <sup>4</sup>              | SILVER <sup>5</sup> | POWER                             | 8631, 8632 MODELS: 500 mA @ 120 V AC OR 28 V DC;<br>250 mA @ 250 V AC. 8633 MODELS: 250 mA @ 120 V AC OR<br>28 V DC; 125 mA @ 250 V AC.                                    |
| <b>G</b>    | YES              | YES               | GOLD OVER<br>SILVER <sup>4</sup> | GOLD <sup>3</sup>   | LOW LEVEL/DRY<br>CIRCUIT OR POWER | 0.4 VA MAX @ 20 V AC OR DC MAX. OR 8631, 8632 MODELS: 500<br>mA @ 120 V AC OR 28 V DC; 250 mA @ 250 V AC. 8633 MODELS:<br>250 mA @ 120 V AC OR 28 V DC; 125 mA @ 250 V AC. |

\* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

<sup>1</sup> CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.

<sup>2</sup> CONTACTS: Coin silver, with gold plate over nickel plate.

<sup>3</sup> TERMINALS: Copper alloy, with gold plate over nickel plate.  
8633 model only: Coin silver, with gold plate over nickel plate.

<sup>4</sup> CONTACTS: Coin silver, silver plated.

<sup>5</sup> TERMINALS: Copper alloy, silver plated. 8633 model only: coin silver.

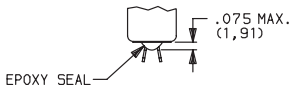
**NOTE:** Any models supplied with Q, B or G contact material are RoHS compliant.

8631, 8632 models  with all options when ordered with G or Q contact material.  
Q contact material standard with C, Z terminations.

## SEAL

**D** NO EPOXY SEAL

**E** EPOXY SEAL



Not available on 8633 model.  
Standard on 8631, 8632 models.

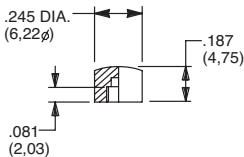
Not available on 8631, 8632 models.  
Standard on 8633 model only.

## PLUNGER COLOR

| OPTION CODE | COLOR |
|-------------|-------|
| <b>2</b>    | BLACK |
| <b>3</b>    | RED   |

## AVAILABLE HARDWARE

Cap

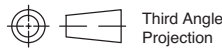


PART NO.

**785101000** WHITE  
**785102000** BLACK  
**785103000** RED

Material: Nylon  
Finish: Gloss

**NOTE:** Other cap colors available, consult Customer Service Center.



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

**C&K**