

# 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.

|                           |  |  |  |                       |  |                           |  |                      |  |
|---------------------------|--|--|--|-----------------------|--|---------------------------|--|----------------------|--|
|                           |  |  |  |                       |  |                           |  |                      |  |
| <b>Switch Function</b>    |  |  |  | <b>Termination</b>    |  | <b>Contact Material</b>   |  | <b>Seal</b>          |  |
| <b>8631</b> SPST Off-Mom. |  |  |  | <b>Z</b> Solder lug   |  | <b>B</b> Gold             |  | <b>D</b> No epoxy    |  |
| <b>8632</b> SPST Off-Mom. |  |  |  | <b>C</b> PC Thru-hole |  | <b>Q</b> Silver           |  | <b>E</b> Epoxy       |  |
| <b>8633</b> SPST On-Mom.  |  |  |  |                       |  | <b>G</b> Gold over silver |  | <b>Plunger Color</b> |  |
|                           |  |  |  |                       |  |                           |  | <b>2</b> Black       |  |
|                           |  |  |  |                       |  |                           |  | <b>3</b> Red         |  |



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



A

Pushbutton

# 8600 Series Microminiature Pushbutton Switches

## SWITCH FUNCTION



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

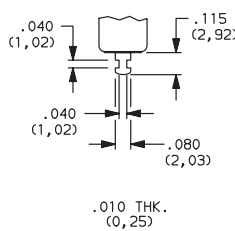
MOM. = Momentary

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

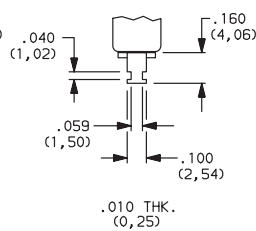
## TERMINATIONS

**Z** SOLDER LUG**C** PC THRU-HOLE

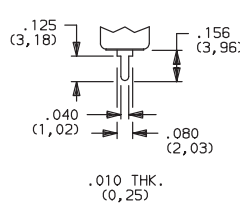
8631, 8632 models only.



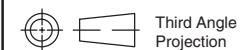
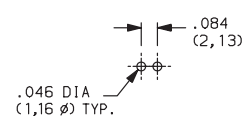
8633 models only.



8631, 8632 models only.



PC MOUNTING



Third Angle  
Projection

Dimensions are shown: Inches (mm)

Specifications and dimensions subject to change

**C&K**

8600 Series  
Microminiature Pushbutton Switches



CONTACT MATERIAL

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

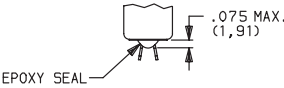
- 1 CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.  
2 CONTACTS: Coin silver, with gold plate over nickel plate.  
3 TERMINALS: Copper alloy, with gold plate over nickel plate.  
8633 model only: Coin silver, with gold plate over nickel plate.  
4 CONTACTS: Coin silver, silver plated.  
5 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.

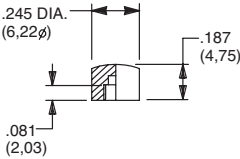
PLUNGER COLOR

| OPTION CODE | COLOR |
|-------------|-------|
| 2           | BLACK |
| 3           | 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.



Third Angle  
Projection

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