

# C&K KM Series Subminiature Pushbutton Switches



### Features/Benefits

- **Reliable contact design**
- **Available with pretravel and overtravel**
- **Extended overtravel option**
- **RoHS compliant**

### Typical Applications

- **Alarm systems**
- **Computers**
- **Detector switch application**



Models Available

### Specifications

**CONTACT RATING:** Q contact material (KM11, KM12 Models): 0.25 AMPS @ 125 V AC or DC (UL); (KM33 Model): 1 AMP @ 125 V AC or 28 V DC. See page A-67 for additional ratings.

**ELECTRICAL LIFE:** 10,000 actuations min. 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:** 10<sup>9</sup>Ω min.

**DIELECTRIC STRENGTH:** 1,000 Vrms min. @ sea level.

**OPERATING TEMPERATURE:** -30°C to 85°C.

**CAP INSTALLATION FORCE:** 10 lbs. max. permissible.

**NOTE:** Any models supplied with Q or B contact material are RoHS compliant. For the latest information regarding RoHS compliance, please go to: [www.ittcannon.com/rohs](http://www.ittcannon.com/rohs).

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

### Materials

**HOUSING & BUSHING:** 6/6 nylon (UL94V-2), black.

**ACTUATOR:** 6/6 nylon (UL 94V-2), natural. Internal o-ring seal, available on KM11 & KM33 models.

**MOVABLE CONTACT:** B contact material: Bronze or copper, with gold plate over nickel plate. See page A-67 for additional contact materials.

**STATIONARY CONTACTS & TERMINALS:** B contact material: Copper, with gold plate over nickel plate. See page A-67 for additional contact materials.

**RETURN SPRING:** Music wire, phosphor coated.

**MOUNTING NUT:** Brass, nickel plated.

**TERMINAL SEAL:** Epoxy.

### 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-66 and A-68. For additional options not shown in catalog, consult Customer Service Center.

|                                                        |                          |                          |                          |                          |                          |                          |                          |                          |                          |
|--------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/>                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>Switch Function</b>                                 |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>KM12</b> On-Mom., SPDT                              |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>KM11</b> Off-Mom., SPST, N.O.                       |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>KM33</b> On-Mom., SPST, N.C.                        |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>Actuator</b>                                        |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>02</b> .398" high, .122" dia. KM12                  |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>01</b> .122" dia. KM11,<br>Stepped, .108" dia. KM33 |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>Bushing/Mounting Style</b>                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>A</b> Right angle                                   |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>RR</b> 1/4-40 thread, .225" high                    |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>Terminations</b>                                    |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>05</b> .110" quick connect                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>08</b> Right angle, PC thru-hole                    |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>02</b> PC Thru-hole                                 |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>WC</b> Wire lead                                    |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>Contact Material</b>                                |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>B</b> Gold                                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>Q</b> Silver                                        |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>Seal</b>                                            |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>NONE</b> No seal                                    |                          |                          |                          |                          |                          |                          |                          |                          |                          |
| <b>E</b> Epoxy                                         |                          |                          |                          |                          |                          |                          |                          |                          |                          |



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



A

Pushbutton

# C&K KM Series Subminiature Pushbutton Switches

## SWITCH FUNCTION

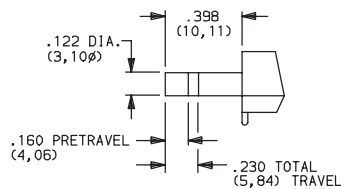


| NO. POLES   | MODEL NO.   | SWITCH FUNCTION |        | CONNECTED TERMINALS |        | SCHEMATIC |
|-------------|-------------|-----------------|--------|---------------------|--------|-----------|
|             |             | POS. 1          | POS. 2 | POS. 1              | POS. 2 |           |
| SP          | <b>KM11</b> | OFF             | MOM.   | OPEN                | 2-1    | SPST N.O. |
|             | <b>KM33</b> | ON              | MOM.   | 2-1                 | OPEN   | SPST N.C. |
| <b>SPST</b> |             |                 |        |                     |        |           |
| SP          | <b>KM12</b> | ON              | MOM.   | 2-1                 | 4-3    | SPDT      |
| <b>SPDT</b> |             |                 |        |                     |        |           |

## ACTUATOR

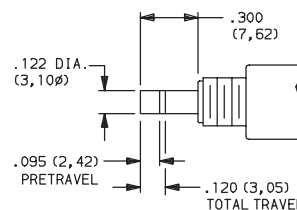


**02** .398" HIGH, .122" DIA.

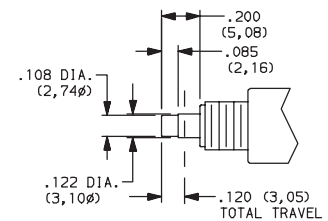


KM12 models only.

**01** .122" DIA.



KM11 models only.



KM33 models only.

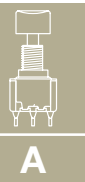


**NOTE:** Caps available for plunger options, see page A-68.



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

# C&K KM Series Subminiature Pushbutton Switches

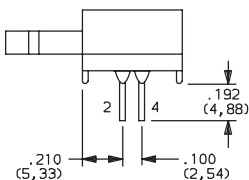


Pushbutton

## BUSHING/ MOUNTING STYLE

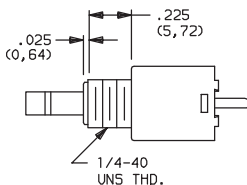


**A** RIGHT ANGLE



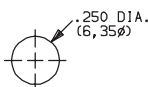
KM12 models only.

**RR** 1/4-40 THREAD, .225" HIGH



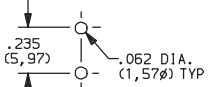
KM11 & KM33 models only.

## PANEL MOUNTING

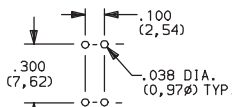


KM11 & KM33 models.

## PC MOUNTING



KM11 models only.

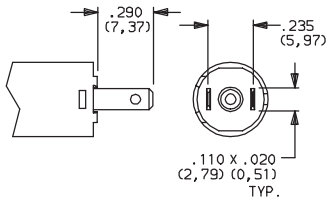


KM12 models only.

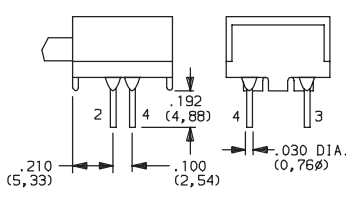
## TERMINATIONS



**05** .110" QUICK CONNECT

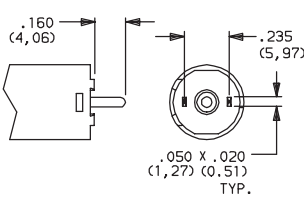


**08** RIGHT ANGLE, PC THRU-HOLE



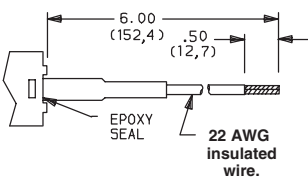
KM12 models only.

**02** PC THRU-HOLE



KM11 models only.

**WC** WIRE LEAD



UL style 1015.

## CONTACT MATERIAL



| OPTION CODE | RoHS COMPLIANT * | RoHS COMPATIBLE * | CONTACT AND TERMINAL MATERIAL | RATINGS               |                                                                                     |
|-------------|------------------|-------------------|-------------------------------|-----------------------|-------------------------------------------------------------------------------------|
| <b>B</b>    | YES              | YES               | GOLD <sup>1</sup>             | LOW LEVEL/DRY CIRCUIT | 0.4 VA MAX. @ 20 V AC OR DC MAX.                                                    |
| <b>Q</b>    | YES              | YES               | SILVER <sup>2</sup>           | POWER                 | 0.25 AMPS @ 125 V AC OR DC (KM11, KM12) (UL)<br>1 AMP @ 125 V AC OR 28 V DC (KM33). |

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

<sup>1</sup> STATIONARY CONTACTS & TERMINALS: Copper, with gold plate over nickel plate.  
MOVABLE CONTACT: Phosphor bronze or beryllium copper, with gold plate over nickel plate.

<sup>2</sup> STATIONARY CONTACTS & TERMINALS: Copper, silver plated (standard with all termination options).  
MOVABLE CONTACT: Phosphor bronze or beryllium copper, silver plated.

<sup>3</sup> STATIONARY CONTACTS & TERMINALS: Copper, with gold plate over nickel plate over silver plate.  
MOVABLE CONTACT: Phosphor bronze or beryllium copper, with gold plate over nickel plate over silver plate.

**NOTE:** Any models supplied with Q or B contact material are RoHS compliant. For the latest information regarding RoHS compliance, please go to: [www.ittcannon.com/rohs](http://www.ittcannon.com/rohs).

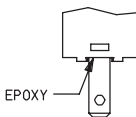
KM11, KM12 models  when ordered with 'Q' contact material.

## SEAL



**NONE** NO SEAL

**E** EPOXY SEAL



Dimensions are shown: Inches (mm)

Specifications and dimensions subject to change





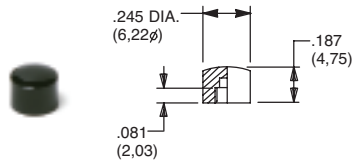
A

Pushbutton

# C&K KM Series Subminiature Pushbutton Switches

## AVAILABLE HARDWARE

Cap, KM33 models

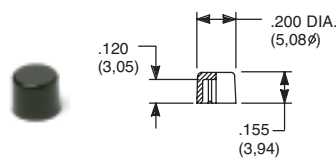


**PART NO.**

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

Material: Nylon  
Finish: Gloss

Cap, KM11 models

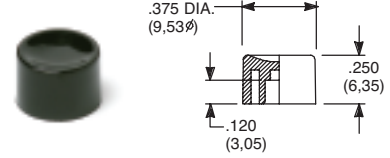


**PART NO.**

**708901000** WHITE  
**708902000** BLACK  
**708903000** RED

Material: Nylon  
Finish: Gloss

Cap, KM11 models

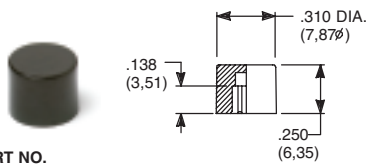


**PART NO.**

**752701000** WHITE  
**752702000** BLACK  
**752703000** RED

Material: Nylon  
Finish: Gloss

Cap, KM11 models

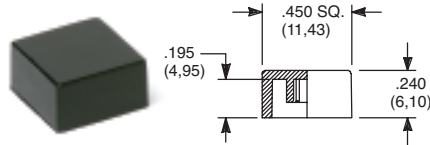


**PART NO.**

**801801000** WHITE  
**801802000** BLACK  
**801803000** RED

Material: Nylon  
Finish: Gloss

Cap, KM11 models



**PART NO.**

**484601000** WHITE  
**484602000** BLACK  
**484603000** RED

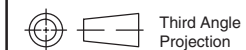
Material: Nylon  
Finish: Gloss

**PART NO.**

**798201000** WHITE  
**798202263** BLACK  
**798203000** RED

Material: Nylon  
Finish: Matte

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



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