10G

Round floating cap • low total height





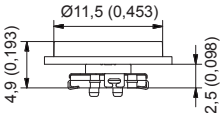
DISTINCTIVE FEATURES

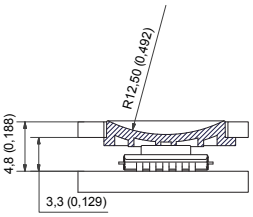
Round cap Ø11.5mm
h=4.9mm
Concave cap
Floating mounting - easy alignment of PCB and front panel
Anti-rotation for printed caps

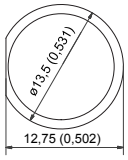
SWITCH SPECIFICATIONS : see Ultramec™ series

6C+10G - J-BEND









The company reserves the right to change specifications without notice. All tolerance if not otherwise specified ±0.2mm.

10G

Round floating cap • low total height

BUILD YOUR PART NUMBER

NON- ILLUMINATED

6C						10G	
SERIES	MOUNTING	POLES	FUNCTION	POSITIONING PINS	PACKAGING	CAP	COLOR

MOUNTING
- J — J-bend

POLES
- 1 — single pole

FUNCTION
- NO — normally open

POSITIONING PINS
- P — optional

PACKAGING
- R — tape & reel

COLOR
- 00 — blue
- 03 — grey
- 08 — red
- 09 — black
- 36 — signal white

MOUNTING

- Panel cut-out : min. Ø11.4 mm
- Switch spacing AxB : min. 14.0 x 14.0 mm

MATERIALS

- Cap : ABS UL94HB

Ultramec™ 6C

High performance tactile switches • low profile • IP67



DISTINCTIVE FEATURES

Low profile h=2.5 mm
8 x 8 mm
Normally open momentary switch
Sealed to IP67
3,000,000 cycles lifetime



ENVIRONMENTAL SPECIFICATIONS

- Sealing : IP67 according to IEC 60529
- Working and storage temperature :-40 °C/+85 °C (-40 °F to 185°F)
- Soldering : JEDEC J-STD-020E

ELECTRICAL SPECIFICATIONS

- Recommended load : 0.5-50 mA 24 VDC
- Contact resistance : <50 mΩ
- Insulation resistance : >10 MΩ
- Contact bounce : <2 mS
- Dielectric strength: 250 V

MECHANICAL SPECIFICATIONS

- Standard actuation force :
  before soldering 4.2 N ±1.0 N
  after soldering : 3.7 N ±0.7 N
- Max. actuation force : 100 N for 10 sec
- Travel : 0.3 mm ±0.15 mm
- Lifetime : 3,000,000 cycles

The company reserves the right to change specifications without notice.

MATERIALS

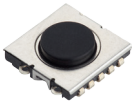
- Housing : PPS UL94V0
- Actuator : silicone
- Contact dome : stainless steel
- Fixed contacts :
  Silver : CuZn + 1 µNi + 4 µAg
- Terminals : CuZn + 1 µNi

All tolerance if not otherwise specified ±0.2mm.

Ultramec™ 6C

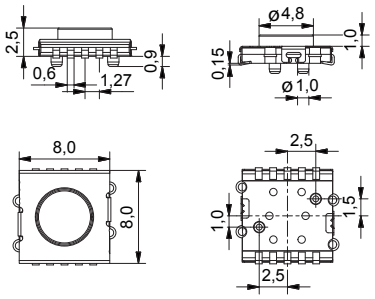
High performance tactile switches • low profile • IP67

6C

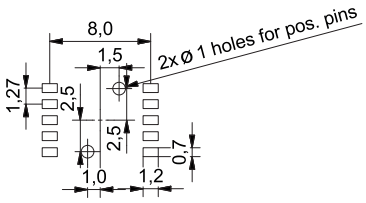


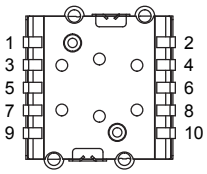
- J-bend
- NO

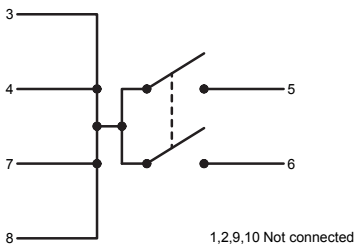
All tolerances unless otherwise noted : ±0.2 mm



PCB LAYOUT & CIRCUIT DIAGRAM







Ultramec™ 6C

High performance tactile switches • low profile • IP67

BUILD YOUR PART NUMBER

NON-ILLUMINATED

SERIES	MOUNTING	POLES	FUNCTION	POSITIONING PINS	PACKAGING
6C	J j-bend	1 single pole	NO normally open	P optional	R tape & reel

ABOUT THIS SERIES

Accessories : See APEM website for cap options

Ultramec™ 6C

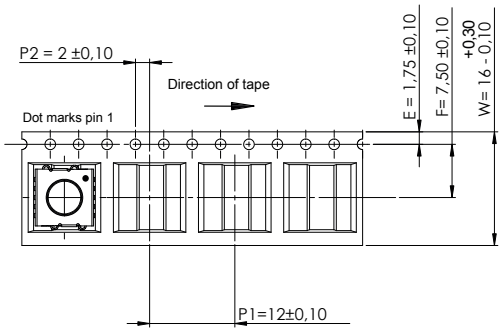
High performance tactile switches • low profile • IP67

TAPE & REEL

Tape and reel is available for the parts listed and has the following specifications

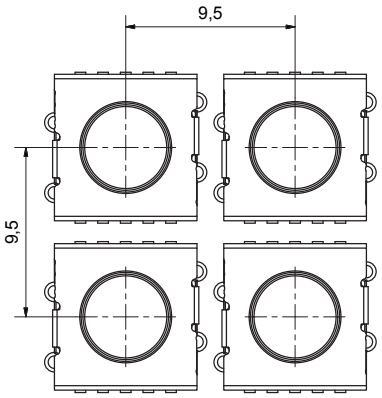
- Reel diameter: Ø330 mm
- Tape width: 16 mm
- Pitch: see list
- Tape and reel material : antistatic or better
- Quantity per reel : see list

PART NO.	ORDERING CODE	PITCH	QUANTITY PER REEL
6CJ1NOP	6CJ1NOPR	12	1000
6CJ1NO	6CJ1NOR	12	1000



MOUNTING

SPACE REQUIREMENT - MATRIX MOUNTING



surface mount (J-bend)

Ultramec™ 6C

High performance tactile switches • low profile • IP67

USAGE GUIDELINES

HOW TO GET THE BEST RESULTS WITH MEC SWITCHES ?

These guidelines are offered to users of MEC Switches as an aid to ensure successful and reliable switch operation. Please see the technical specifications for details on operating and storage temperatures and soldering guidelines to make sure you select the best switch for your application.

When reflow soldering is taking place, MEC strongly recommend that the temperature profile is analyzed and compared with the temperature rating of the switch. It is also important to monitor the accumulated heat buildup from both the pre-heat zones and the solder zone.

Standard accessories for Ultramec™ 6 series switches are made from ABS plastic with a maximum operating temperature of 65 °C.

MOUNTING AND DISMOUNTING

If switches are to be mounted in rows, it is essential that the recommendations regarding spacing are followed. PC board thickness should be 1.4 ±0.2 mm.

SOLDERING AND CLEANING ULTRAMEC™ SERIES

Ultramec™ series switches are fully sealed to IP67 specifications to minimize solder flux and aqueous based cleaning solutions from entering the switch and contaminating the contacts. The switches can be placed on the PC board with other components and reflow soldered. Ultramec™ series offers a high level of sealing, however, with aqueous solvent solutions care must be taken to avoid the worst case situation with water jets, complete immersion into a liquid with a temperature below the board or surface tension reducing additives.

Recommended cleaning methods are demineralized water. Any surface tension reducing agents, such as soap, must not be used as they risk causing a potential leakage of the switch.

SOLDERING - SURFACE MOUNT VERSIONS

For all methods - infrared, convection and vapor phase. The upper limit 240 °C/40 sec must be observed. The soldering temperature profile must have moderate temperature gradients. (JEDEC J-STD-020E)

ROHS COMPLIANCE

As of 1 July 2006 MEC has completed the conversion to RoHS compliance. For more info please see our homepage www.apem.com

TEMPERATURE LIMITS:

Switch	160 °C
Accessories	65 °C

PACKAGING

Ultramec™ series switches are delivered on tape/reel. Each reel contains 1000 pcs.
It is also possible to purchase half full reels.