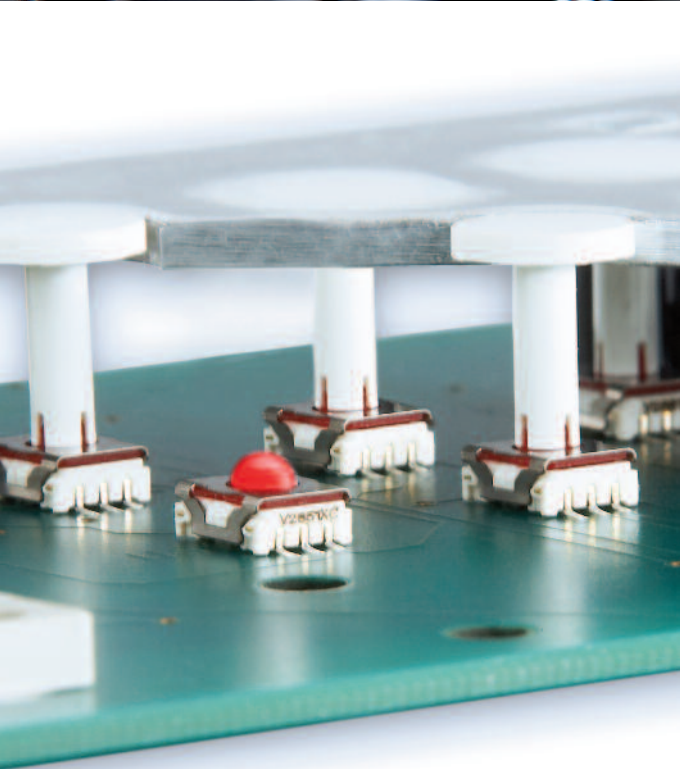




# MICON 5

»Just click it...  
...just feel it«

Please press



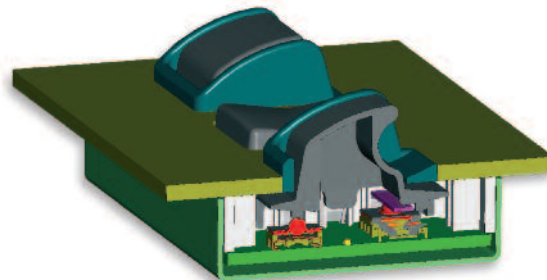
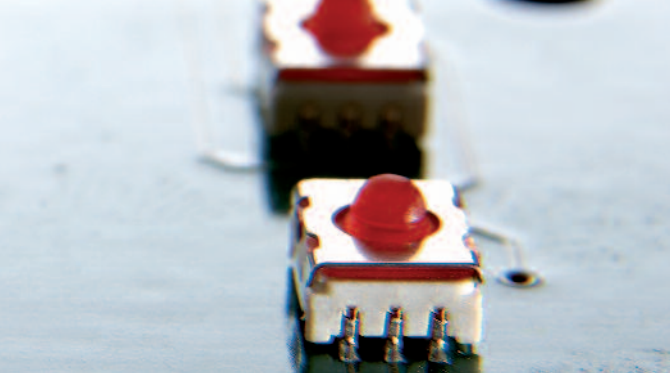
## Switching individually

With the new MICON 5, switching is redefined. The click varies from a gentle to a distinctly sportive sound, depending on the type used. This makes it possible to tailor the look and feel of the input keyboard to the style of the overall system.

RAFI's new MICON 5 short-travel keyswitch sets the benchmark in miniaturisation while safeguarding switching reliability and excellent tactile and acoustic properties.

In membrane keyboards, in operating panels or under keycaps: The RAFI MICON 5 leaves great freedom to your designers and offers to your customers the switching reliability that lasts for a product's life.





## MICON 5

### The small keyswitch finds a place anywhere

The MICON 5 excels by its minimum dimensions, superior tactile properties and a sealed contact system with gold contacts. This makes it ideally suited for the most sophisticated applications just as for the most severe conditions of use.

- ▶ **MICON 5: The reliable switching unit for use under keycaps.**  
Push, pull, rocker, double push functions, etc. Whatever you want to switch, you can realise all your ideas with the MICON 5.
- ▶ **MICON 5: Unbeatable also under membrane overlays.**  
Experience pays. The MICON 5 offers you utmost flexibility in designing many different control panels in combination with the RAFI plungers of variable heights and actuation areas, ranging from extremely small keypads to exclusive control panels.





## Part numbers

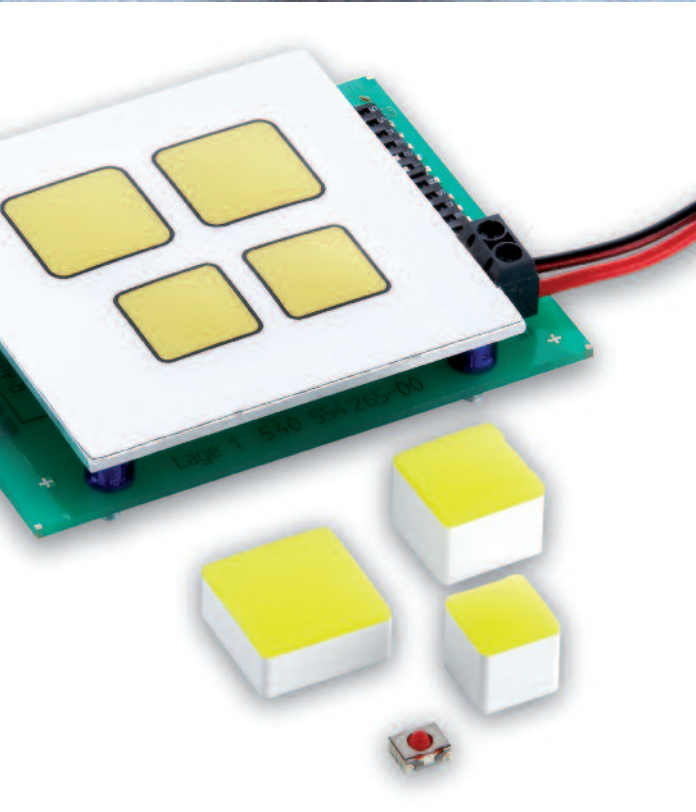
Order no.	Terminals	Height [mm]	Operating force $F_1$ [N] (+ 20%)	Switching travel $S_2$ [mm] (+ 0,5 mm)	Operating life [operations] (testing force)
1.14.002.101/0000	SMD	standard 3,85	3,0	0,7	1.000.000 (4 N)
1.14.002.001/0000	SMD	standard 3,85	4,5	0,8	250.000 (6 N)
1.14.002.111/0000	SMD	standard 3,8	5,5	0,9	1.000.000 (8 N)
1.14.002.011/0000	SMD	standard 3,85	8,5	1,1	250.000 (12 N)
1.14.002.103/0000	SMD	low 3,45	3,0	0,6	1.000.000 (4 N)
1.14.002.003/0000	SMD	low 3,45	4,5	0,7	250.000 (6 N)
1.14.002.113/0000	SMD	low 3,45	5,5	0,7	1.000.000 (8 N)
1.14.002.106/0000	THT	standard 3,85	3,0	0,7	1.000.000 (4 N)
1.14.002.006/0000	THT	standard 3,85	4,5	0,8	250.000 (6 N)
1.14.002.116/0000	THT	standard 3,85	5,5	0,9	1.000.000 (8 N)
1.14.002.016/0000	THT	standard 3,85	8,5	1,1	250.000 (12 N)



## Mechanical characteristics

(preliminary data)

Operating force range:	See table part numbers, others available on request
Tactile feedback:	Uniform over the service life and temperature range

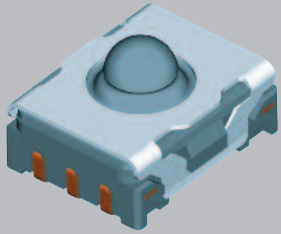


## Mechanical Design

(preliminary data)

Contact system:	Snap-action contact, gold-plated on both sides
Contact arrangement:	1 NO contact
Keyswitch mounting:	On printed circuit board
Fixing:	Reflow or wave soldering; gluing not required
Terminals:	High-grade tin (lead-free to WEEE standards)
Terminal shape:	Recessed J-shape terminals for SMD, PCB solder terminals for THT
Flammability of materials:	UL 94 HB (non-halogenous acc. to WEEE)
Dimensions:	6,4 x 5,1 x 3,85/3,45 mm

# RAFI MICON 5



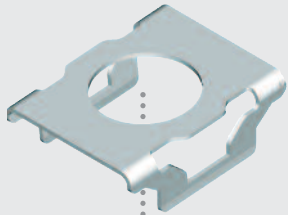
Basic element



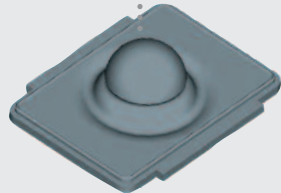
SMD-J on back

Without cover

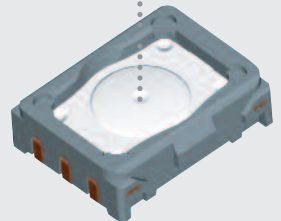
Overall height 3.85 mm



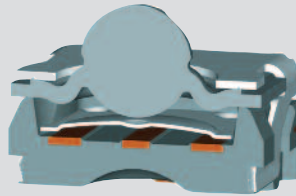
Metal cover



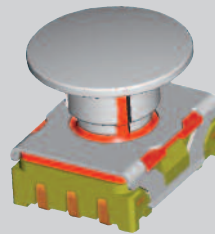
Silicone seal and actuator



Housing with snap disc



Sectional view of keyswitch



Standard keyswitch with extension plunger

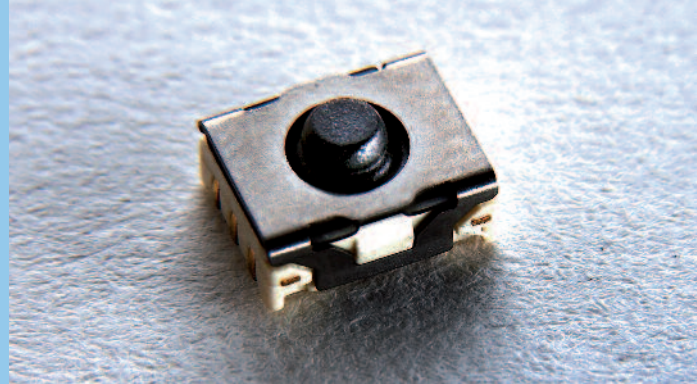


MICON 5 under customer-specific keycaps

# Electrical characteristics

(preliminary data)

Rated voltage:	0.02 to 42 V AC / DC
Rated current:	0.01 to 100 mA
Rated power, max.:	1 W
Contact resistance:	<100 mOhms
Bouncing time:	<5 ms
Switching travel:	0,5 ... 1 mm, depending on version



# Other characteristics

(preliminary data)

Operating temperature:	- 40 °C to + 85 °C
Storage temperature:	- 50 °C to + 95 °C
Resistance to extreme climates:	Constant enviroment to IEC 600 68-2-78 and 2-30, Variable environment to IEC 600 68-2-30 and 2-33
Operating life:	250.000/1.000.000 operations

# MICON 5 in summary

- ▶ SMD-J or THT terminals
- ▶ Dimensions (L x W x H): 6.4 x 5.1 x 3.85 mm
- ▶ Minimum grid: 5.72 x 7.95 mm
- ▶ Flexible illumination options: One or more LEDs per button or keypad
- ▶ Suitable for use under keycaps or under a membrane overlay
- ▶ Various operating forces, suitable to each application
- ▶ Optimum tactile and acoustic feedback: Distinct click
- ▶ Hermetically sealed contact system
- ▶ Reliable gold/gold contacts
- ▶ Operating life up to 1 million operations





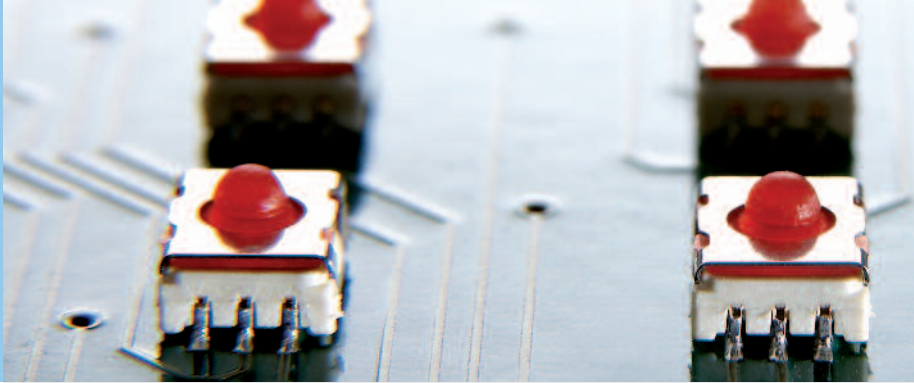
RAFI

Microsoft  
Windows CE

3:03 PM

POWER OS APP EXPOSE

Alt Pg up  
Pg dn  
Shift



## Please contact

RAFI GmbH & Co. KG  
Ravensburger Straße 128-134  
D-88276 Berg / Ravensburg

Phone +49 (0) 751 89-0  
Fax +49 (0) 751 89-1300  
Email: [info@rafi.de](mailto:info@rafi.de)  
Internet: [www.rafi.de](http://www.rafi.de)

04/2008