

MICON 5 SL, SMT standard, 5 ± 1 N, 1 NO



fields of application

- > Measurement-control-regulation
- > Mechanical and system engineering
- > Electro-medical

special features

- Gold contacts, reliable switching with low currents
- > Special tactile feedback
- ➤ High packing density due to small form factor (5.1 x 6.4 mm)
- > Different operating forces
- > Ring and full illumination of the button surface due to plunger
- > Variable overall heights due to plunger
- > Terminal technology: SMT
- > Traceability through product identification in accordance with DIN EN ISO 9001

CE

description

MICON 5 tactile switches offer extreme switching reliability, with a very small space requirement. They can be arranged individually, in rows or as key blocks. For use beneath overlays, we recommend combining the MICON 5 tactile switches with plungers. Here are the properties at a glance:

- > Suitable for the most important soldering techniques
- > Soldering bath for THT versions
- > Reflow soldering for SMT versions
- > Vapor phase soldering for SMT versions
- > Manual soldering
- > Processing of the SMT design with SMT automatic assembly machines
- > IMDS entry
- > Packaging in blister tape, spool with 2,100 pieces
- > Proposal for stencil printing: 150 μm stencil with 10% pad reduction on area

The MICON 5 SL is not suitable for automotive applications.

technical data

> general

Operating temperature, min. $-40\,^{\circ}\text{C}$ Operating temperature, max. $125\,^{\circ}\text{C}$ Storage temperature, min. $-40\,^{\circ}\text{C}$

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date: Nov 23, 2024 page: 1/7

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90 °C Storage temperature, max.

illuminated No

Soldering Reflow

Solder heat resistance according DIN EN 60068-2-58 to standard DIN EN 61760-1

Blister Packaging Packaging unit 2,100 pcs.

Operating life 10,000,000 cycles Degree of protection, front side, IP67 (IP6K7)

according to ISO 20653

Degree of protection on rear side IP67 (IP6K7)

acc. to ISO 20653

MSL Moisture Sensitivity Level

Shock resistance according to 100 g at 6 ms amplitude semi-sinusoidal

standard IEC 60068-2-27

oscillation restistance according

to standard IEC 60068-2-6

5 g at 10...500 Hz

MOQ order 2,100 pcs. RoHS compliant Yes **REACH** compliant Yes

> mounting diameters

Outside dimension, length $6.4 \pm 0.1 \, \text{mm}$ Outside dimension, width $5.1 \pm 0.1 \, \text{mm}$ $3.85 \pm 0.1 \, \text{mm}$ Installation height Grid, min. 6 x 7.8 mm

> mechanical data

Actuation function momentary contact function

Operating force, max. 8 N Operating force, min. $5 \pm 1 \, \text{N}$

Switching travel $0.9 \pm 0.15 \, \text{mm}$

Bounce time at 10 mm/s <5 ms Contact function 1 NO

Contact system Snap-action contact

SPST - Single Pole Single Throw

Contact material Gold Solderability Yes Terminal on the rear **SMT**

> electrical data

Rated voltage, min. 0.02 V 35 V Rated voltage, max. Dielectric strength 250 V Rated current, min. 0.00001 A Rated current, max. 0.1 A Rated power, max. 1 W

direct links

> RAFI eCatalog

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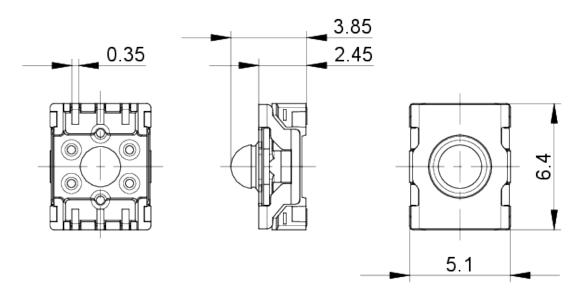
Ravensburger Str. 128-134

88276 Berg / Ravensburg

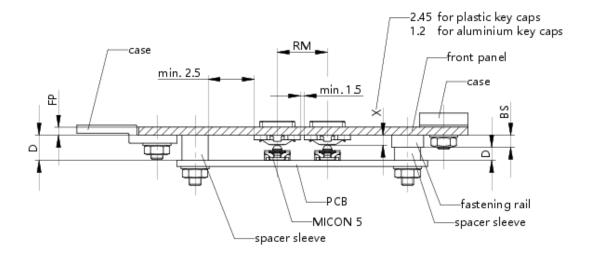


drawings

Dimensioned drawing

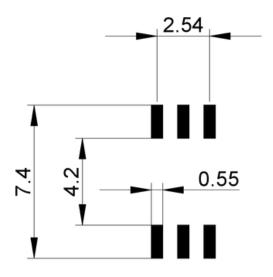


System drawing

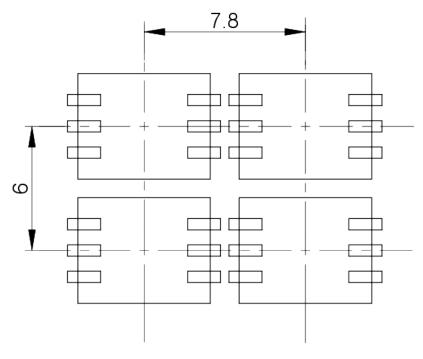




PCB drawing



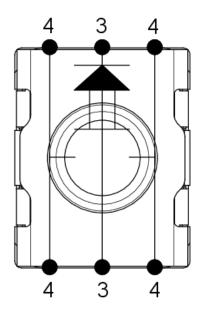
PCB drawing

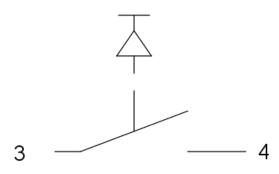


MICON 5 SMT



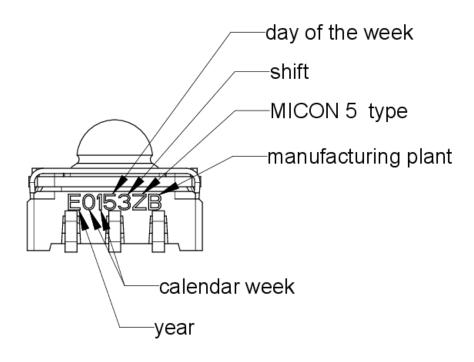
Schematic diagram





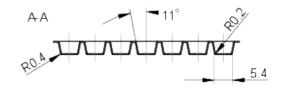
Circuit symbol according to IEC 617

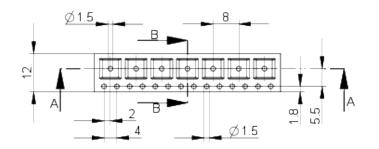
Product labeling drawing

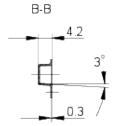




Packaging drawing







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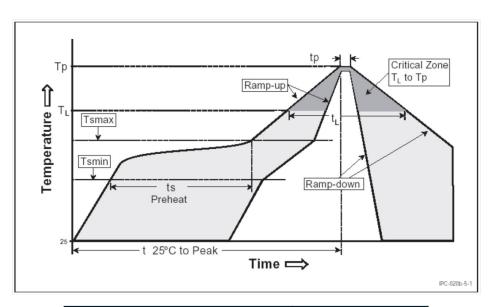


mounting

RAFI soldering profile for ROHS compliant reflow components



Publication date: October 7, 2021



Parameter	RAFI values
Gradient (T _L to T _P)	max. 3°C / s
Preheating zone Minimum temperature (T _{smin}) Maximum temperature (T _{smax}) Time (from min. to max.) (ts)	150°C 200°C 60 - 120 s
Gradient (T _{smax} to T _L)	max. 3°C / s
Time over melting temperature (T _L) time (t _L)	217°C 60 – 150 s
Peak temperature (T _P)	max. 260°C (+0°C)
Time within peak temperature – 5°C (tp)	20-40 s
Gradient ramp down	max. 6°C/s
Time difference from 25°C to peak temperature	max. 8 minutes

The reflow soldering profile is based on the definition of Jedec J-STD-020D.

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page 1 of 1