

# MICON 5 SAFETY, SMT standard, $2.9 \pm 0.6$ N, 1 NC + 1 NO

**COMING SOON**


## fields of application

- Measurement-control-regulation
- Mechanical and system engineering
- Automotive
- 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



## 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



## technical data

### ➤ general

Operating temperature, min.	-40 °C
Storage temperature, min.	-40 °C
Operating temperature, max.	125 °C
Storage temperature, max.	90 °C
illuminated	No
Soldering	Reflow

### direct links

- RAFI eCatalog

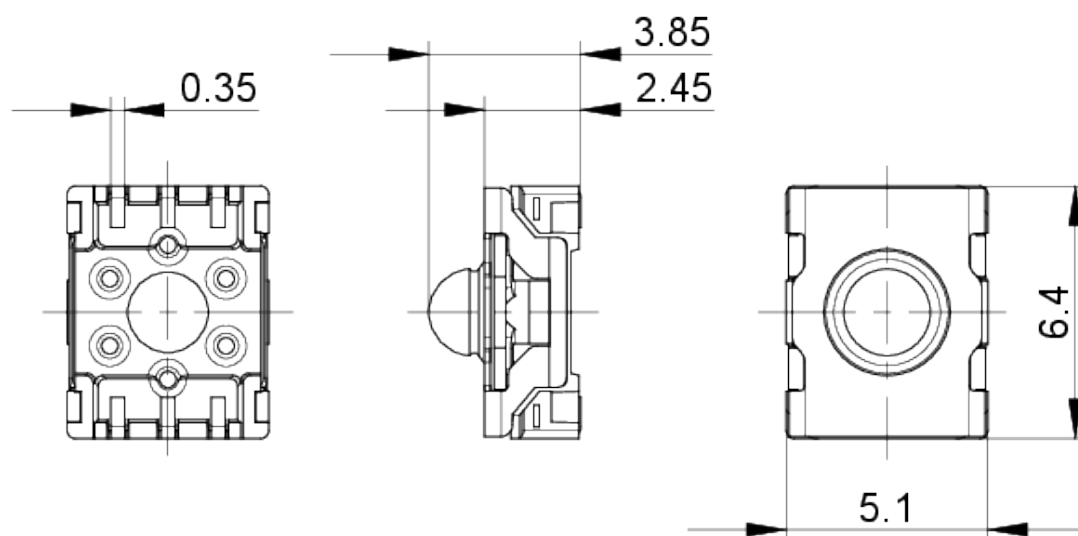
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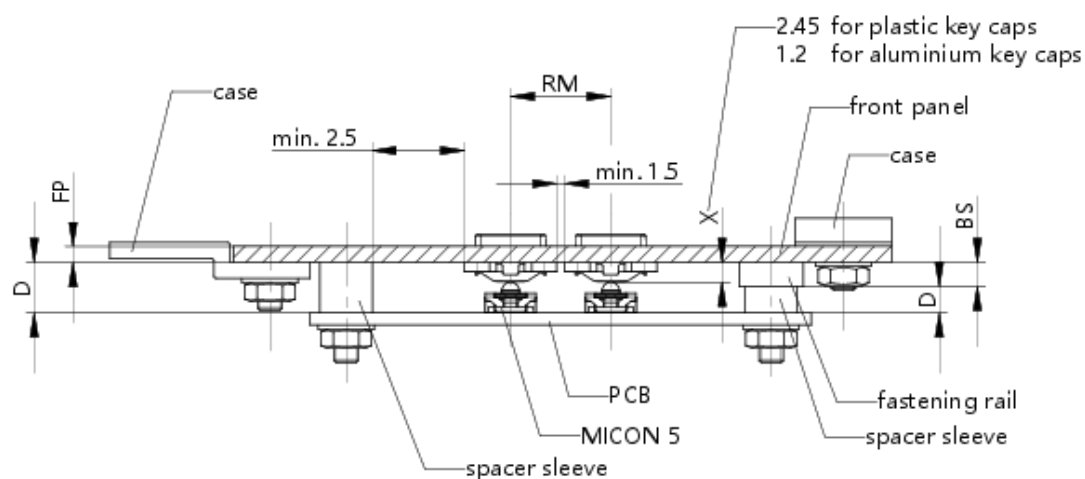
Solder heat resistance according to standard	DIN EN 60068-2-58
Packaging	DIN EN 61760-1
Operating life	Blister
B10	1,000,000 cycles
Degree of protection, front side, according to DIN EN 60529	1,300,000 cycles
Degree of protection, rear side, according to DIN EN 60529	IP54
MSL Moisture Sensitivity Level	IPx7
Shock resistance according to standard IEC 60068-2-27	IP54
oscillation resistance according to standard IEC 60068-2-6	IPx7
RoHS compliant	1
REACH compliant	50 g at 11 ms amplitude semi-sinusoidal
	5 g at 10...500 Hz
	Yes
	Yes
<b>&gt; mounting diameters</b>	
Installation height	3.85 ± 0.1 mm
Grid, min.	6 x 7,8 mm
Outside dimension, length	6.4 ± 0.1 mm
Outside dimension, width	5.1 ± 0.1 mm
Outside dimension, height	3.85 ± 0.1 mm
<b>&gt; mechanical data</b>	
Actuation function	momentary contact function
Operating force, max.	4 N
Operating force, min.	2.9 ± 0.6 N
Switching travel	0.7 ± 0.15 mm
Contact function	1 NC + 1 NO
Contact material	Gold
Terminal on the rear	SMT
Solderability	Yes
<b>&gt; electrical data</b>	
Rated voltage, min.	0.02 V
Rated voltage, max.	35 V
Dielectric strength	250 V
Rated current, min.	0.00001 A
Rated current, max.	0.1 A
Rated power, max.	1 W

## drawings

### Dimensioned drawing



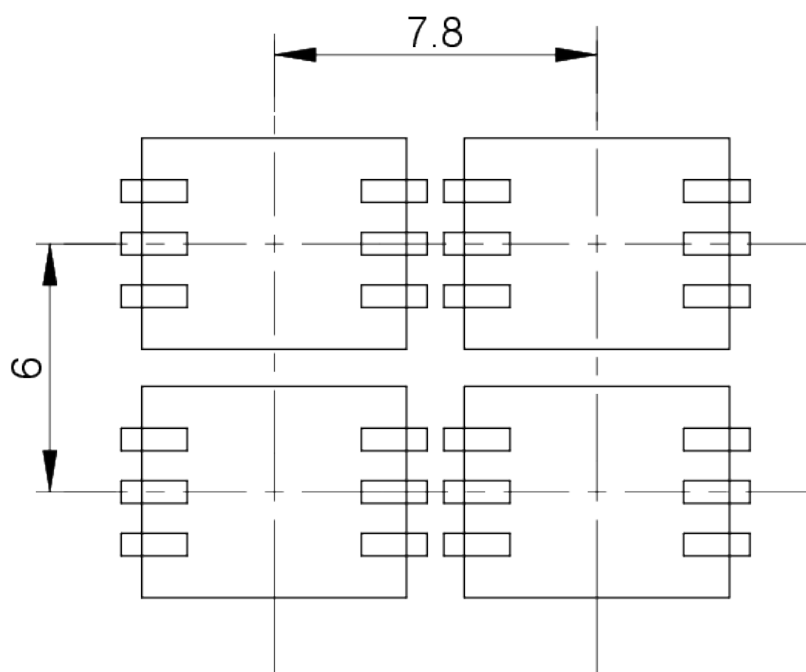
### System drawing



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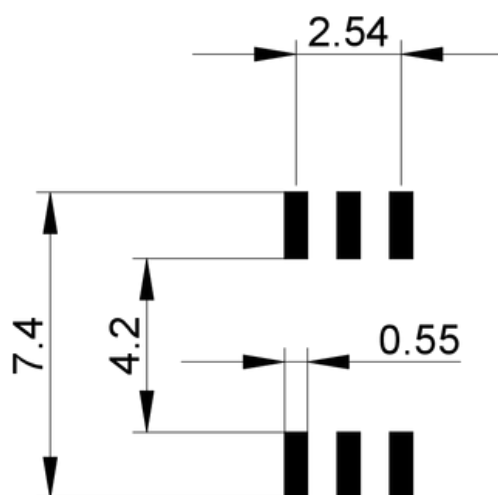


PCB drawing



MICON 5 SMT

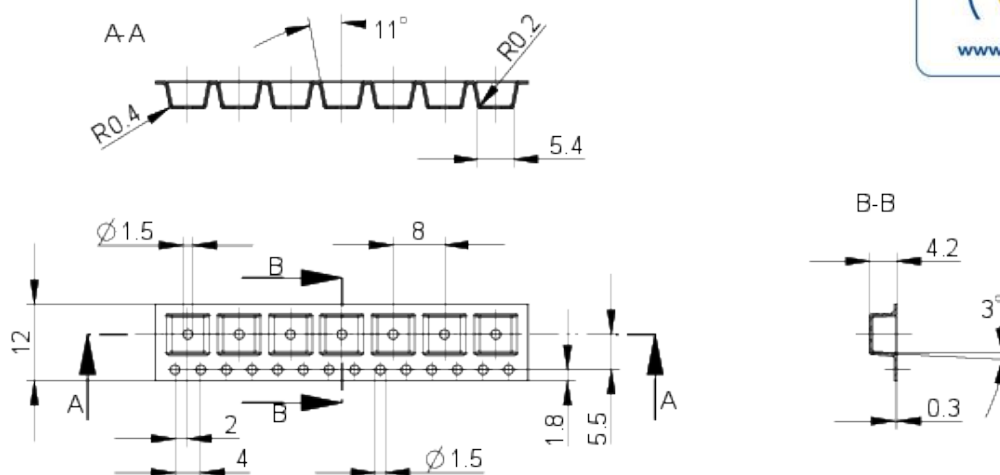
PCB drawing



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## Packaging drawing

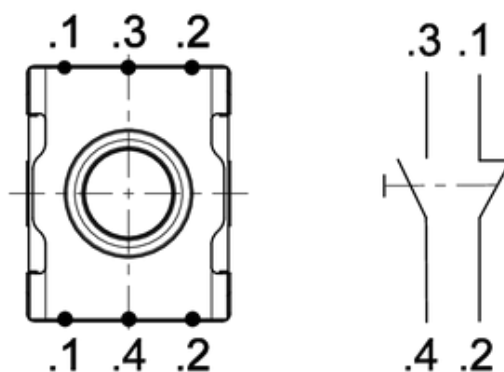


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## Connection drawing

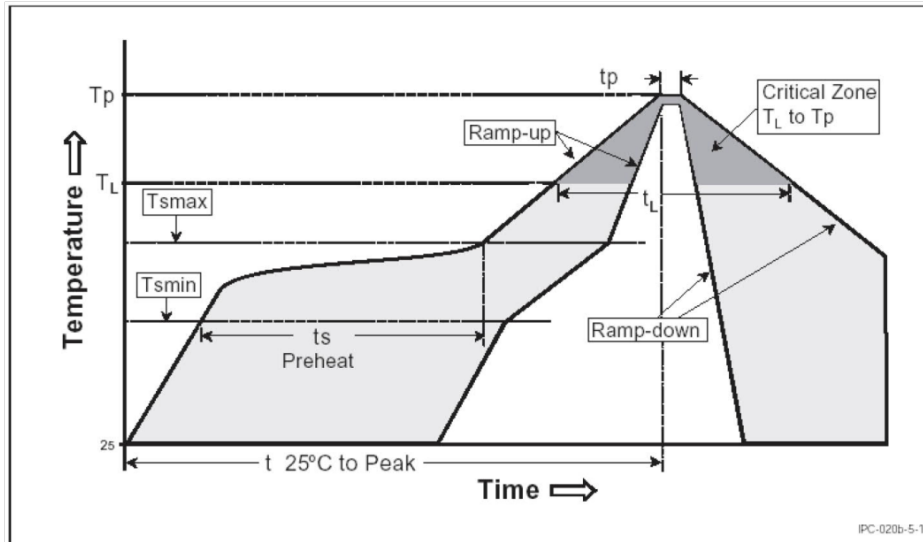


## mounting

### RAFI soldering profile for ROHS compliant reflow components



Publication date: October 7, 2021



Parameter	RAFI values
Gradient ( $T_L$ to $T_P$ )	max. $3^{\circ}\text{C} / \text{s}$
<b>Preheating zone</b>	
Minimum temperature ( $T_{smin}$ )	$150^{\circ}\text{C}$
Maximum temperature ( $T_{smax}$ )	$200^{\circ}\text{C}$
Time (from min. to max.) ( $t_s$ )	60 - 120 s
Gradient ( $T_{smax}$ to $T_L$ )	max. $3^{\circ}\text{C} / \text{s}$
Time over melting temperature ( $T_L$ ) time ( $t_L$ )	$217^{\circ}\text{C}$ 60 - 150 s
Peak temperature ( $T_P$ )	max. $260^{\circ}\text{C} (+0^{\circ}\text{C})$
Time within peak temperature $- 5^{\circ}\text{C}$ ( $t_P$ )	20-40 s
Gradient ramp down	max. $6^{\circ}\text{C} / \text{s}$
Time difference from $25^{\circ}\text{C}$ to peak temperature	max. 8 minutes

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

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