

# MICON 5, SMT standard, 3.5 ± 0.7 N, 1 NO

## LBL\_NRFND

## 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

# 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

# technical data

> general		
Operating temperature, min.	-40 °C	direct links
Operating temperature, max.	90 °C	> RAFI eCatalog
Storage temperature, min.	-40 °C	
Storage temperature, max.	90 °C	
illuminated	No	
Soldering	Reflow	

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	Solder heat resistance according	DIN EN 60068-2-58
	to standard	DIN EN 61760-1
	Packaging	Blister
	Packaging unit	2,100 pcs.
	net weight	0.2 g
	Operating life	250,000 cycles
	B10	325,000 cycles
	MSL Moisture Sensitivity Level	1
	Shock resistance according to	100 g at 6 ms amplitude semi-sinusoidal
	standard IEC 60068-2-27	
	oscillation restistance according	5 g at 10500 Hz
	to standard IEC 60068-2-6	
	MOQ order	2,100 pcs.
	RoHS compliant	Yes
	REACH compliant	Yes
>	mounting diameters	
	Outside dimension, length	6.4 ± 0.1 mm
	Outside dimension, width	5.1 ± 0.1 mm
	Installation height	3.85 ± 0.1 mm
	Grid, min.	6 x 7.8 mm
>	mechanical data	
	Actuation function	momentary contact function
	Operating force, max.	6 N
	Operating force, min.	3.5 ± 0.7 N
	Switching travel	0.8 ± 0.15 mm
	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
	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

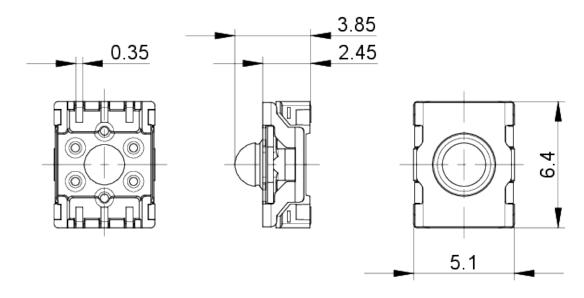
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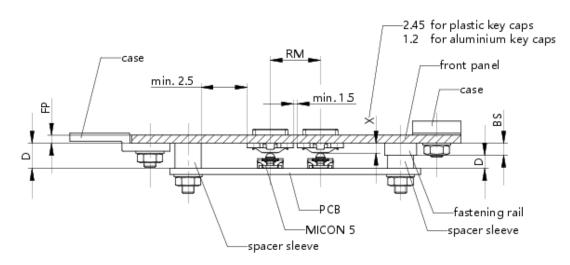


# drawings

## **Dimensioned drawing**



System drawing

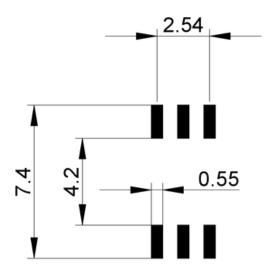


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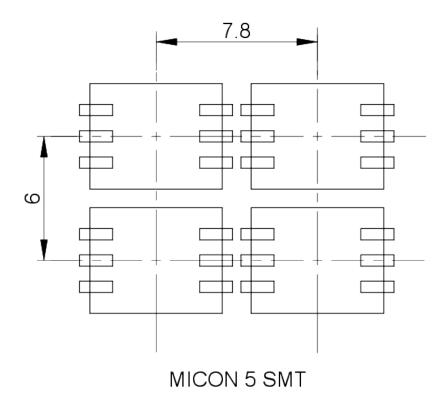




## **PCB drawing**



#### **PCB drawing**



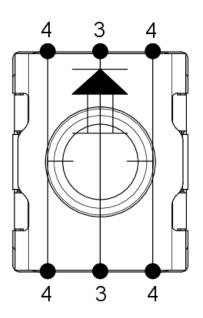
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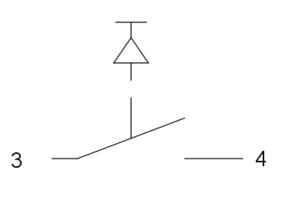
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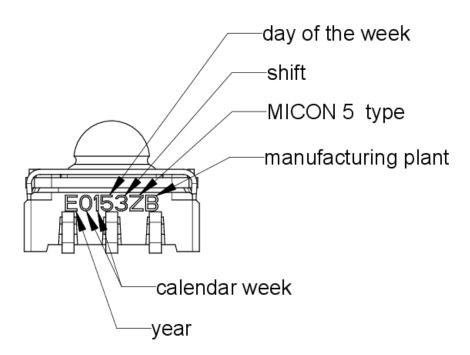
### Schematic diagram





Circuit symbol according to IEC 617

**Product labeling drawing** 



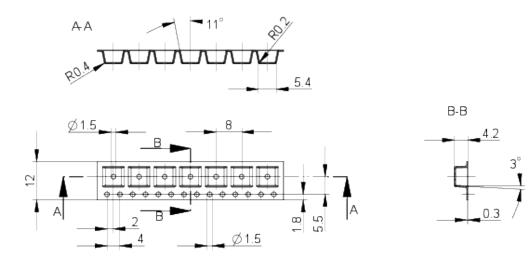
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## **Packaging drawing**



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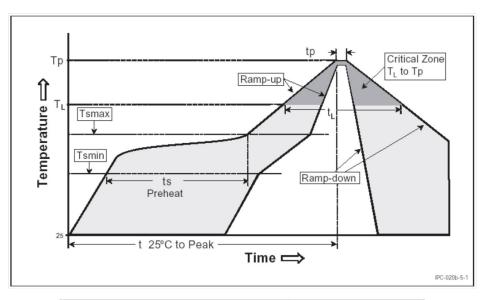


# mounting

# 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 <sub>smin</sub> ) Maximum temperature (T <sub>smax</sub> ) 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 <sub>P</sub> )	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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