


# MICON 5, SMT standard, 8 ± 1.6 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



## 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

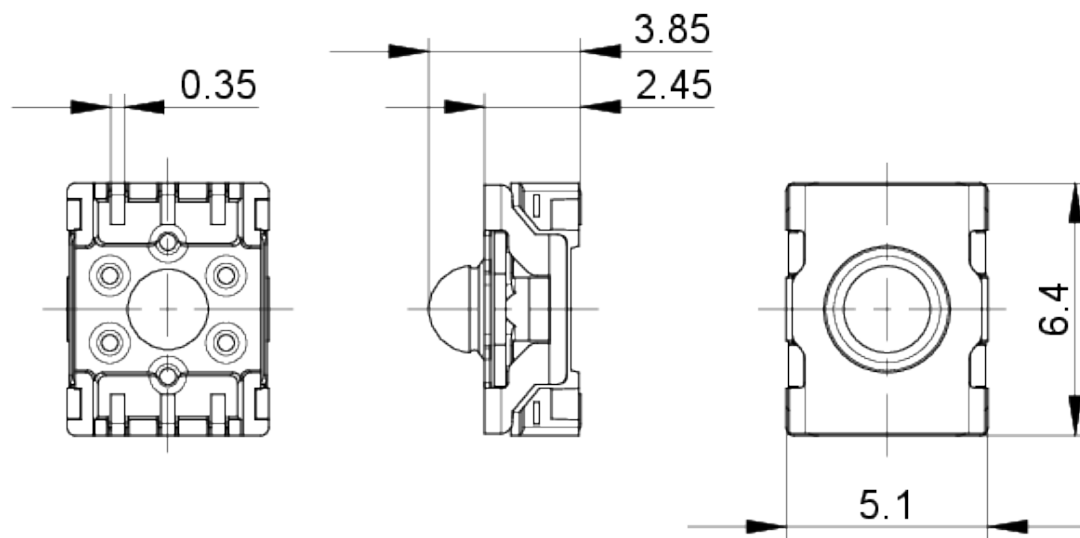
## technical data

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

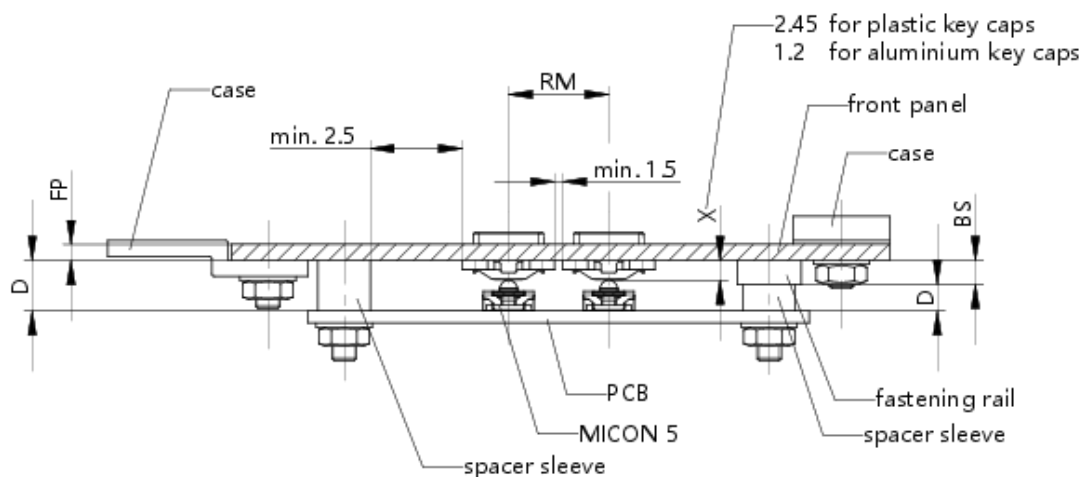
Solder heat resistance according to standard	DIN EN 60068-2-58 DIN EN 61760-1
Packaging	Blister
Packaging unit	2,100 pcs.
net weight	0.2 g
Operating life	250,000 cycles
B10	325,000 cycles
MSL Moisture Sensitivity Level	1
Shock resistance according to standard IEC 60068-2-27	100 g at 6 ms amplitude semi-sinusoidal
oscillation resistance according to standard IEC 60068-2-6	5 g at 10...500 Hz
MOQ order	2,100 pcs.
RoHS compliant	Yes
REACH compliant	Yes
<b>&gt; mounting diameters</b>	
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
<b>&gt; mechanical data</b>	
Actuation function	momentary contact function
Operating force, max.	12 N
Operating force, min.	8 ± 1.6 N
Switching travel	1.1 ± 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
<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

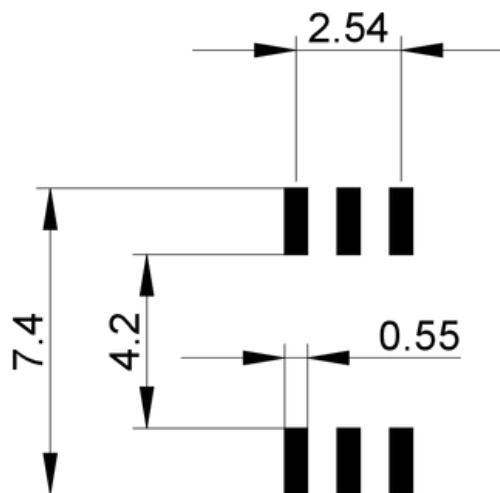
### Dimensioned drawing



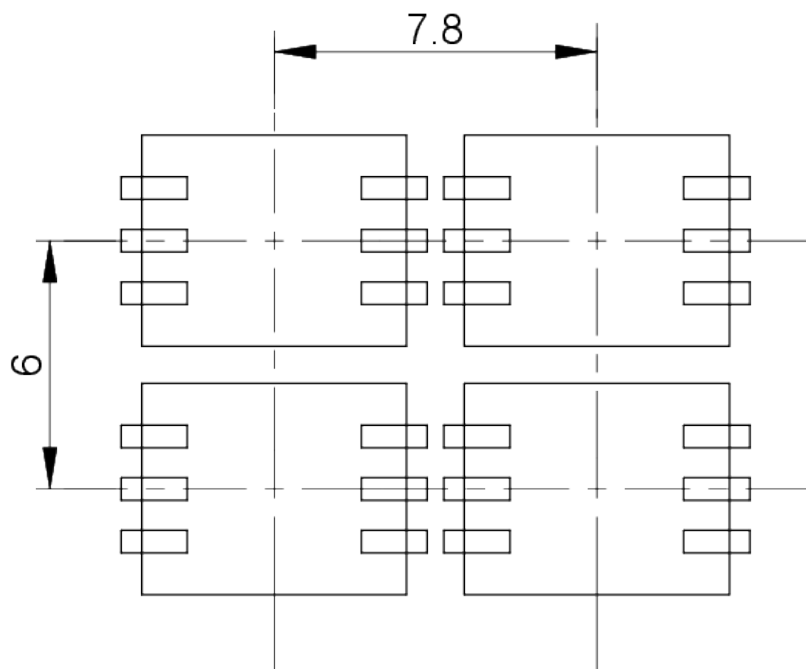
### System drawing



PCB drawing

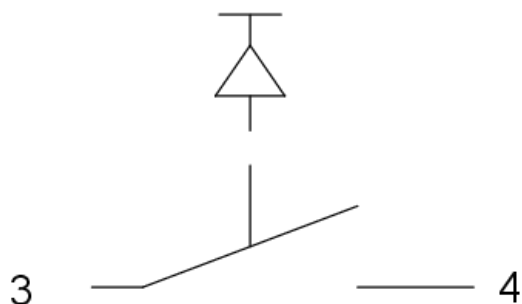
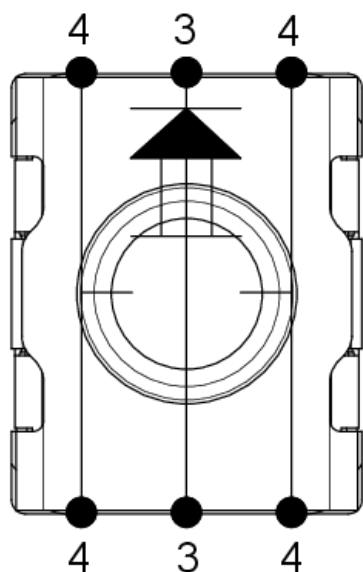


PCB drawing



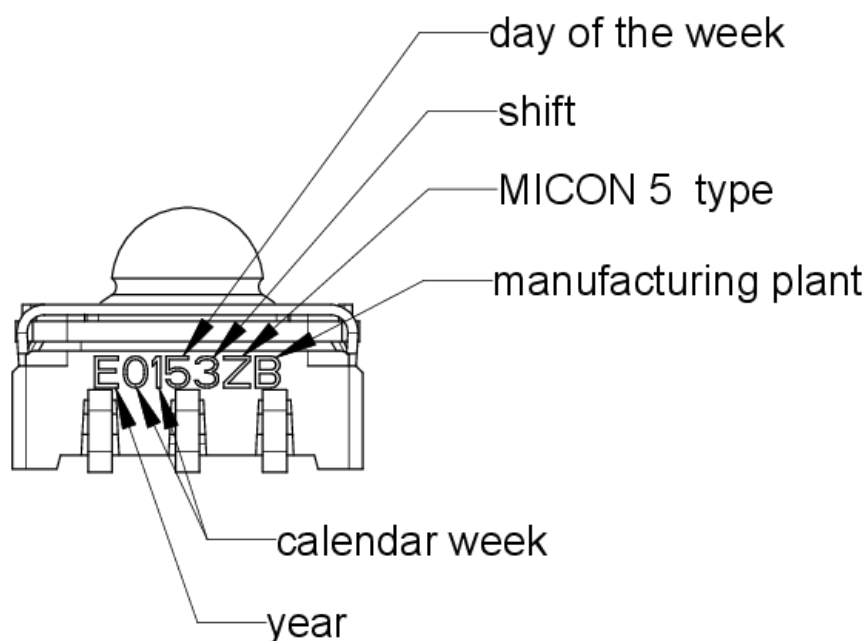
MICON 5 SMT

## Schematic diagram

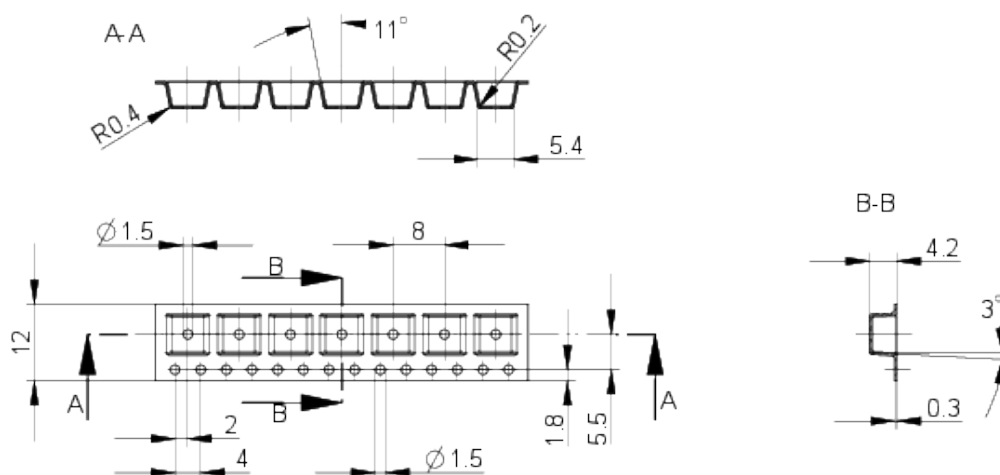


Circuit symbol according  
to IEC 617

## Product labeling drawing



**Packaging drawing**

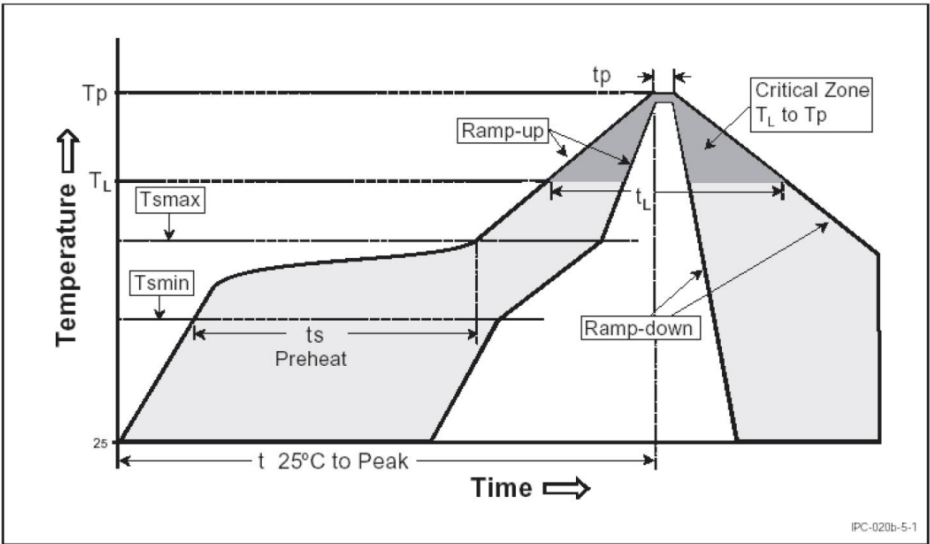


mounting

RAFI soldering profile for ROHS compliant  
reflow components

RAFI

Publication date: October 7, 2021



Parameter	RAFI values
Gradient (T <sub>L</sub> to T <sub>P</sub> )	max. 3°C / s
<b>Preheating zone</b>	
Minimum temperature (T <sub>smin</sub> )	150°C
Maximum temperature (T <sub>smax</sub> )	200°C
Time (from min. to max.) (ts)	60 - 120 s
Gradient (T <sub>smax</sub> to T <sub>L</sub> )	max. 3°C / s
Time over melting temperature (T <sub>L</sub> ) time (t <sub>L</sub> )	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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