

# MICON 5, SMT low, 3.6 ± 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

MICON 5, SMT nieder mit einer Bauhöhe von nur 3,45 mm Verarbeitungshinweis: Sonderpipette (Siemens Siplace Best.-Nr. 348514-02) Bestückung mit Revolverkopf. Vorschlag für Schablonendruck: 150 ?m-Schablone mit 10% Pad-Verkleinerung auf Fläche

#### technical data

> general

Operating temperature, min. -40 °C
Operating temperature, max. 90 °C

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

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

direct links

> RAFI eCatalog



Packaging Blister
Packaging unit 2,100 pcs.
net weight 0.3 g

Operating life 250,000 cycles B10 325,000 cycles

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  $5.1 \pm 0.1 \text{ mm}$  Installation height  $3.45 \pm 0.1 \text{ mm}$  Grid, min.  $6 \times 7.8 \text{ mm}$ 

> mechanical data

Actuation function momentary contact function

Operating force, max. 6 N

Operating force, min.  $3.6 \pm 0.7 \text{ N}$ Switching travel  $0.7 \pm 0.15 \text{ mm}$ 

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.

Rated voltage, max.

Dielectric strength

Rated current, min.

Rated current, max.

O.1 A

Rated power, max.

0.02 V

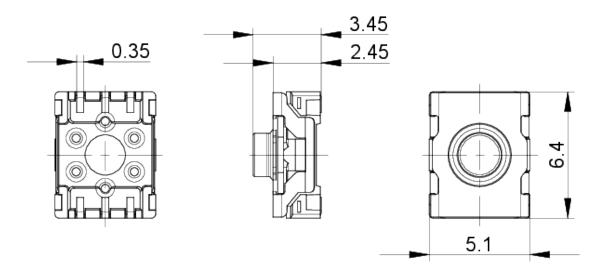
250 V

0.00001 A

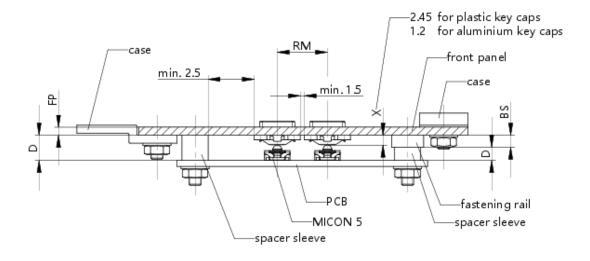


## drawings

### **Dimensioned drawing**

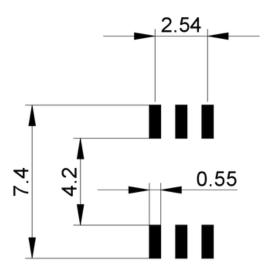


### System drawing

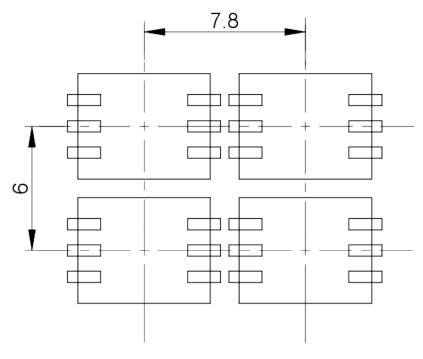




#### **PCB** drawing



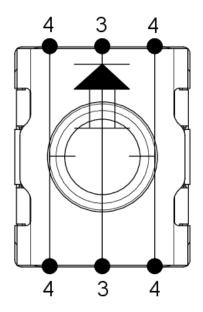
### **PCB** drawing

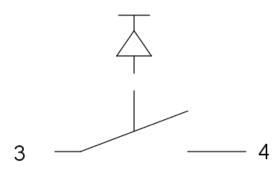


MICON 5 SMT



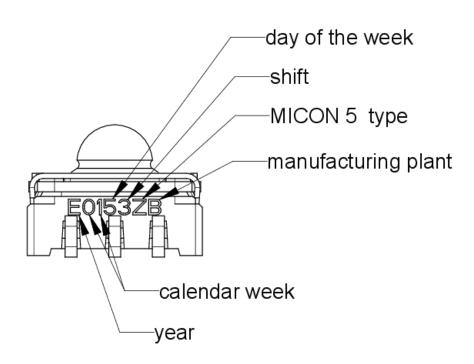
#### Schematic diagram





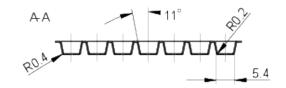
Circuit symbol according to IEC 617

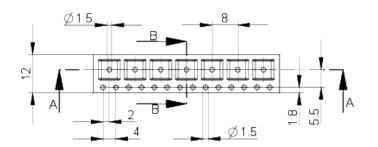
#### **Product labeling drawing**

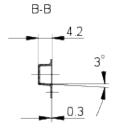




#### **Packaging drawing**







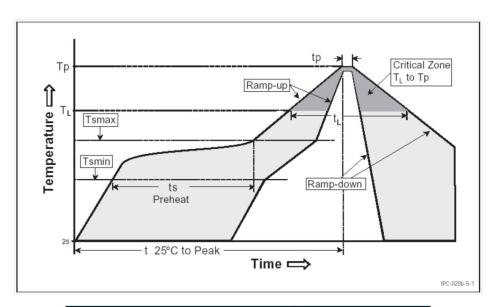


### mounting

### **RAFI** soldering profile for ROHS compliant reflow components



Publication date: October 7, 2021



Parameter	RAFI values
Gradient (T <sub>L</sub> to T <sub>P</sub> )	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 <sub>smax</sub> to T <sub>L</sub> )	max. 3°C/s
$\label{eq:total_continuity}  \begin{tabular}{ll} Time over \\ melting temperature (T_L) \\ time (t_L) \\ \end{tabular}$	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.

The information in this sheet only contains general descriptions and / or performance features, which may not apply precisely as described to the respective application, and which my change due to further product enhancements. The technical data, illustrations and other information about our products are the mere results of individual technical testing. These descriptions and other product features are only binding if they expressly agreed upon at the time of the conclusion of a binding contract. In all other cases, we reserve the right to make technical changes as well as changes of availability. Pictures and other graphic illustrations are approximations only. All product names may be trademarks or brand names of the RAFI Group or any other sub-supplier of RAFI. The use of such by any third parties for their own purposes may infringe the rights of the respective entity holding those rights. Subject to change and errors excepted. Details about delivery times and availability are noncommittal and have no legal force.

RAFI GmbH & Co. KG Ravensburger Str. 128-134, 88276 Berg / Ravensburg GERMANY – www.rafi-group.com

page 1 of 1