


MICON 5, SMT standard, 1.5 ± 0.3 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

Key switch 1.14.002.201/0000 does not offer any tactile or acoustic feedback. It is therefore usually only used as a redundant additional switch for other MICON standard key switches, if this is required for safety reasons.

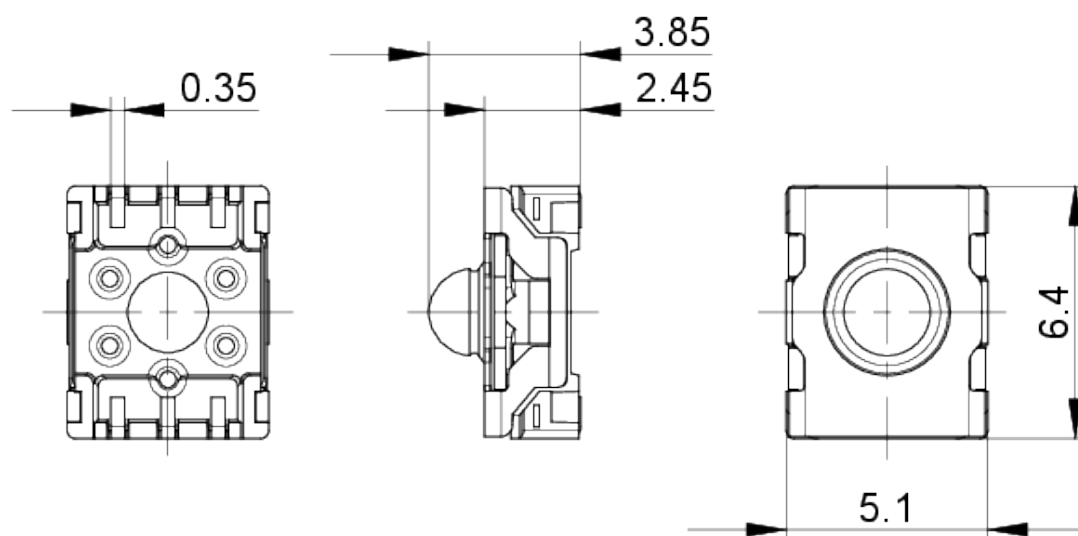
technical data

| > 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 | |

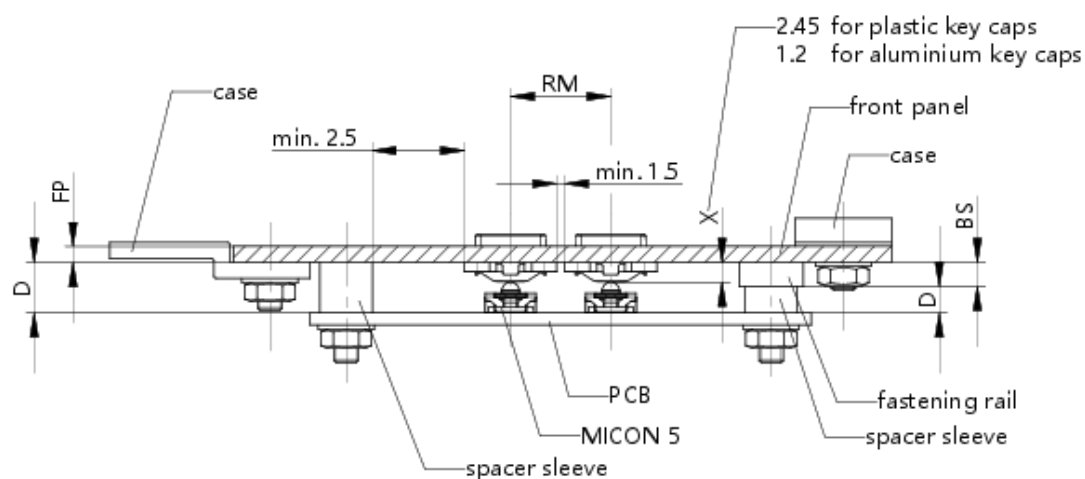
| | |
|--|--|
| Solder heat resistance according to standard | DIN EN 60068-2-58 DIN EN 61760-1 |
| Packaging | Blister |
| Packaging unit | 2,100 pcs. |
| net weight | 0.3 g |
| Operating life | 1,000,000 cycles |
| B10 | 1,300,000 cycles |
| MSL Moisture Sensitivity Level | 1 |
| Shock resistance according 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 |
| > 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. | 4 N |
| Operating force, min. | 1.5 ± 0.3 N |
| Switching travel | 0.7 ± 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 |

drawings

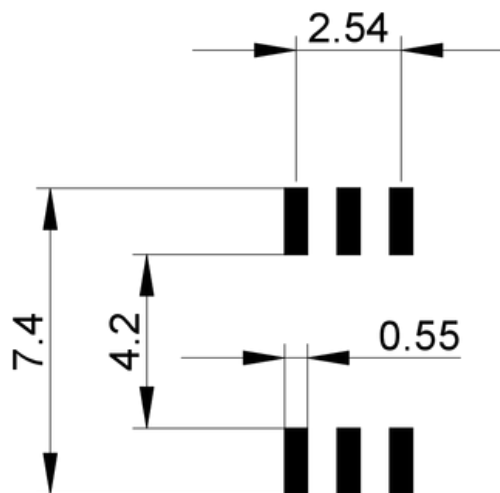
Dimensioned drawing



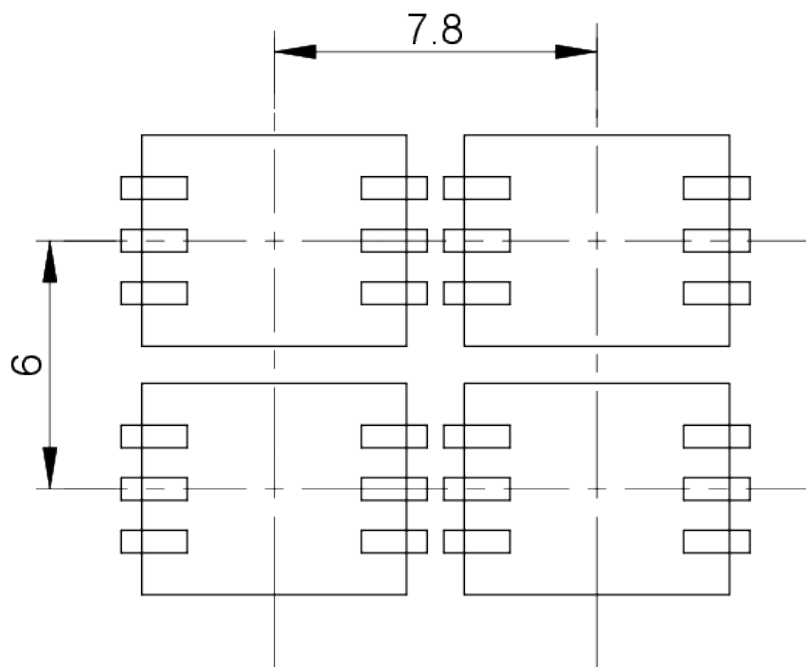
System drawing



PCB drawing

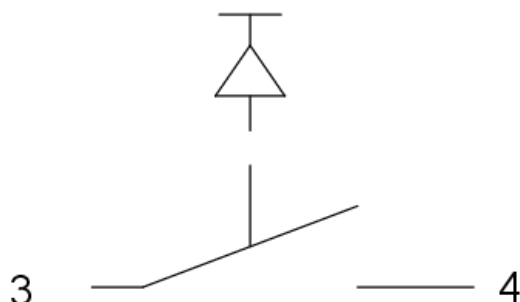
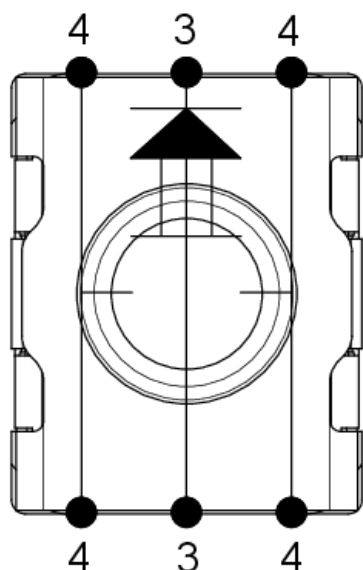


PCB drawing



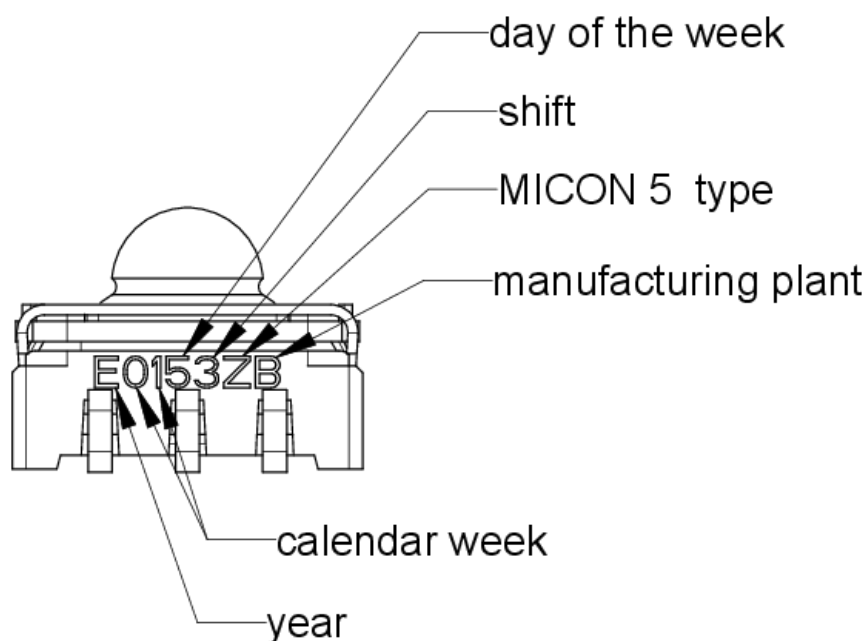
MICON 5 SMT

Schematic diagram

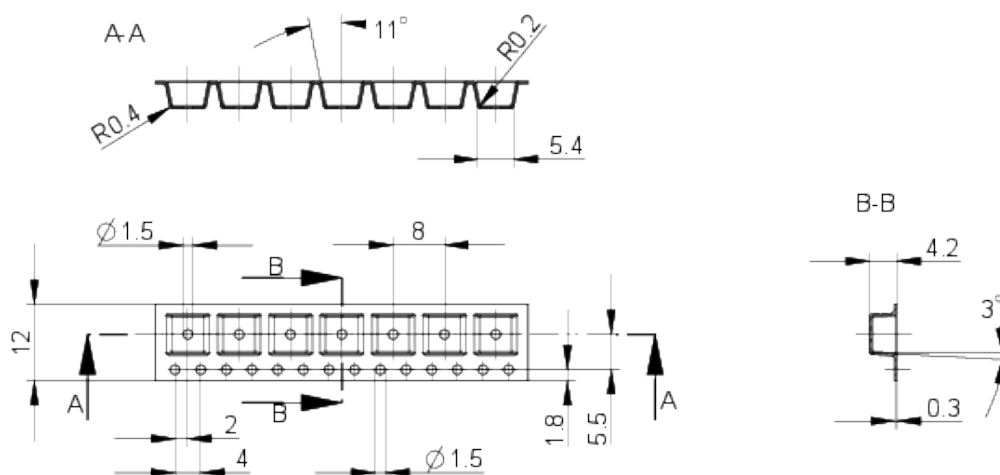


Circuit symbol according
to IEC 617

Product labeling drawing



Packaging drawing

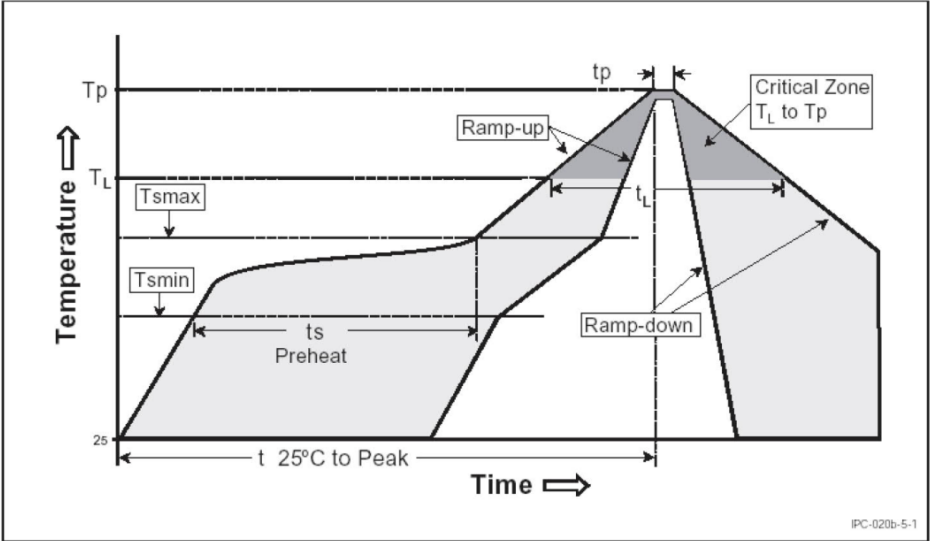


mounting

RAFI soldering profile for ROHS compliant
reflow components

RAFI

Publication date: October 7, 2021



| Parameter | RAFI values |
|---|---------------------|
| Gradient (T _L to T _P) | max. 3°C / s |
| Preheating zone | |
| Minimum temperature (T _{smin}) | 150°C |
| Maximum temperature (T _{smax}) | 200°C |
| Time (from min. to max.) (ts) | 60 - 120 s |
| Gradient (T _{smax} to T _L) | max. 3°C / s |
| Time over melting temperature (T _L) time (tl) | 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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