

RACON 8 ST, SMT, 9.4 ± 2.1 N, 1 NO



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
- › Different operating forces
- › Variable overall heights due to plunger
- › Terminal technology: SMT or THT
- › Traceability through product identification



description

Our top-quality RACON 8 tactile switches – in dimensions 8.4 x 8.4 mm – feature an unmistakable click, high switching reliability, and a sealed contact system. That has made RACON the standard in many industries. Whether for automotive applications, systems with keycaps, or membrane keyboards, RACON impresses in the THT or SMT versions – for your application too.

RACON 8 tactile switches can be arranged individually, in rows or as key blocks. When used beneath membrane overlays, the RACON key switches should be combined with plungers. 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 designs with SMT automatic assembly machines
- › IMDS entry

technical data

› general

| | |
|--|-------------------|
| Color | blue |
| Operating temperature, min. | -40 °C |
| Operating temperature, max. | 125 °C |
| Storage temperature, min. | -50 °C |
| Storage temperature, max. | 85 °C |
| illuminated | No |
| Soldering | Reflow |
| Solder heat resistance according to standard | DIN EN 60068-2-58 |
| Packaging | Blister |

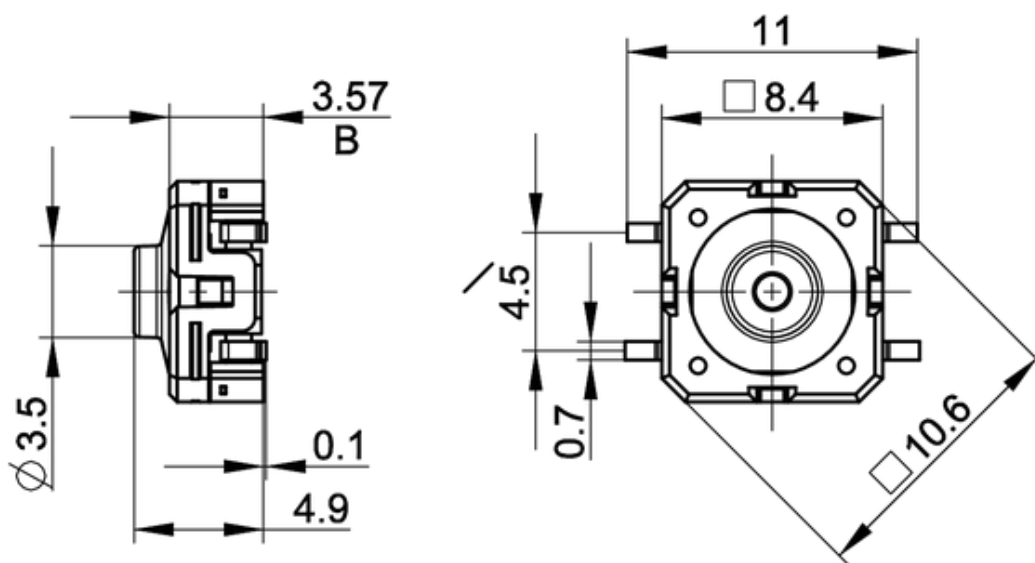
direct links

- › [RAFI eCatalog](#)

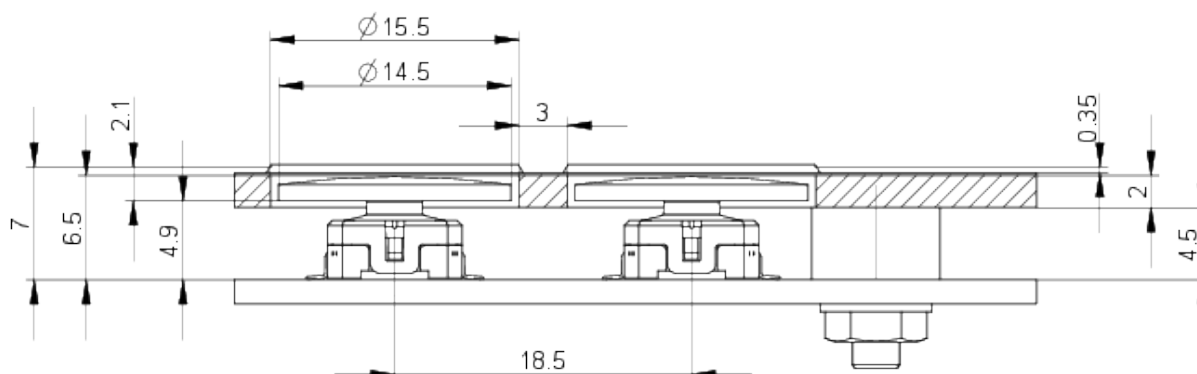
| | |
|---|--|
| Packaging unit | 1,000 pcs. |
| Operating life | 250,000 cycles |
| B10 | 325,000 cycles |
| Degree of protection, front side, according to ISO 20653 | IP67 (IP6K7) |
| Degree of protection on rear side acc. to ISO 20653 | IP67 (IP6K7) |
| MSL Moisture Sensitivity Level | 1 |
| Corrosive gas testing according to standard | Yes |
| MOQ order | 1,000 pcs. |
| RoHS compliant | Yes |
| REACH compliant | Yes |
| Product code | TJ |
| > mounting diameters | |
| Outside dimension, length | 8.4 mm |
| Outside dimension, width | 8.4 mm |
| Installation height | 5.1 ± 0.12 mm |
| Grid, min. | 8.9 x 12.7 mm |
| > mechanical data | |
| Actuation function | momentary contact function |
| Operating force, max. | 12 N |
| Operating force, min. | 9.4 ± 2.1 N |
| Switching travel | 0.56 ± 0.12 mm |
| Bounce time at 10 mm/s | <5 ms |
| 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 |
| Rated current, min. | 0.00001 A |
| Rated current, max. | 0.1 A |
| Rated power, max. | 1 W |

drawings

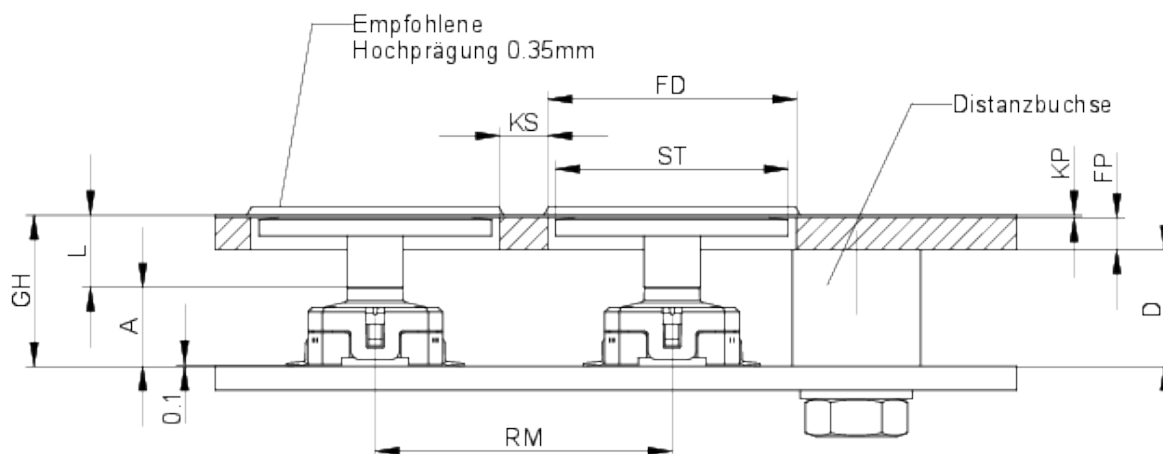
Dimensioned drawing



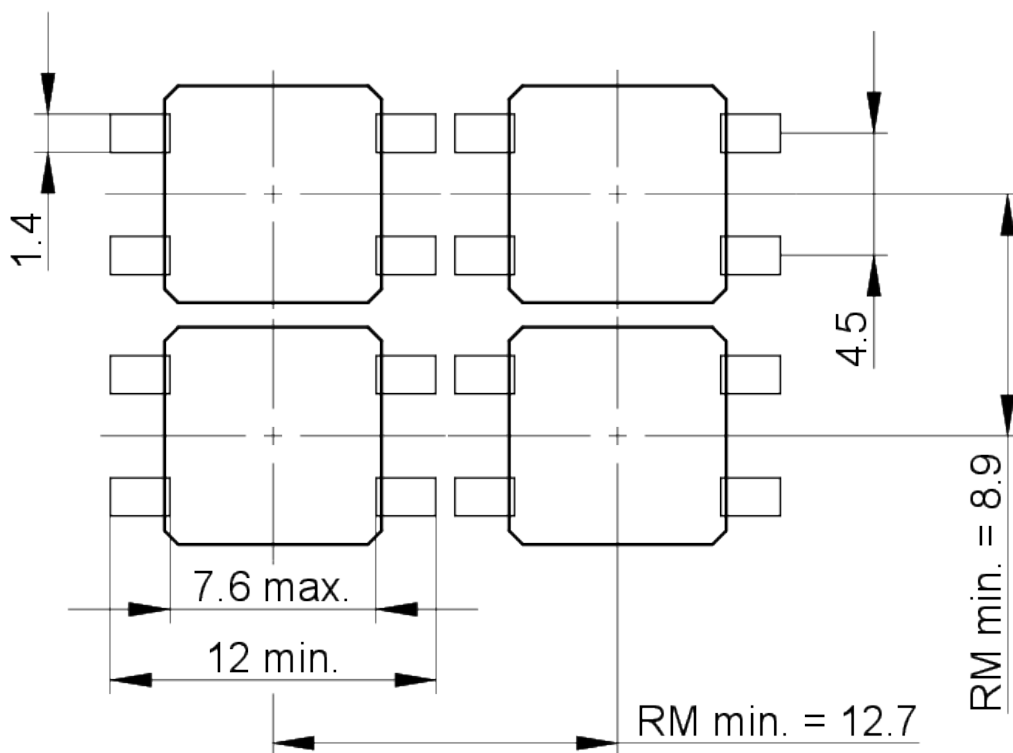
System drawing



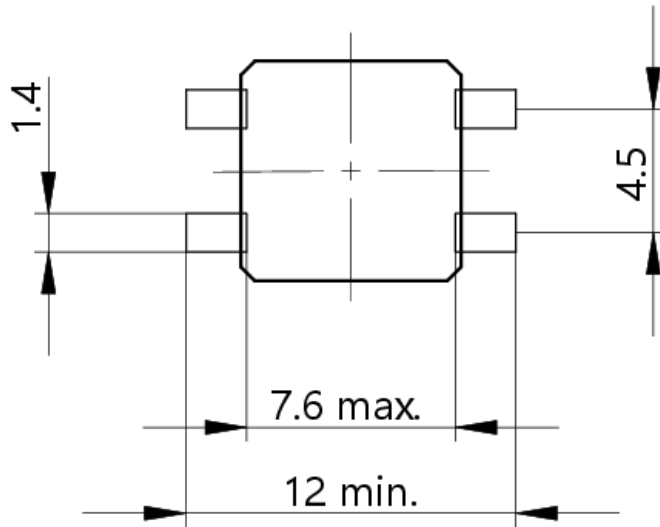
System drawing



PCB drawing

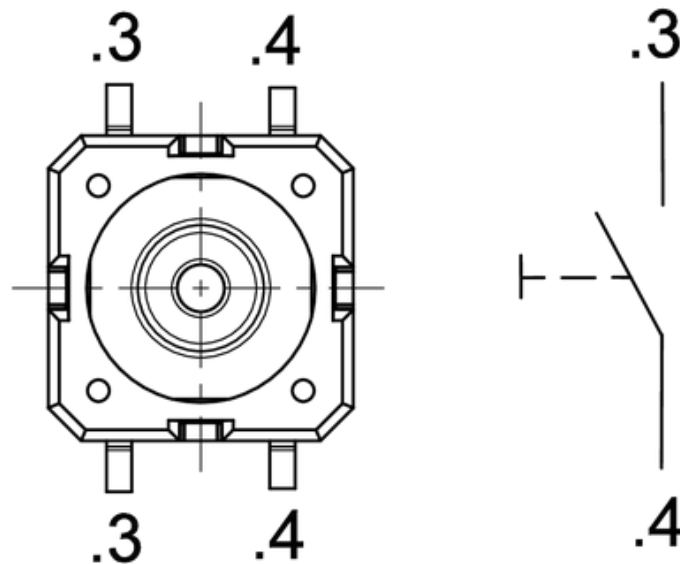


PCB drawing

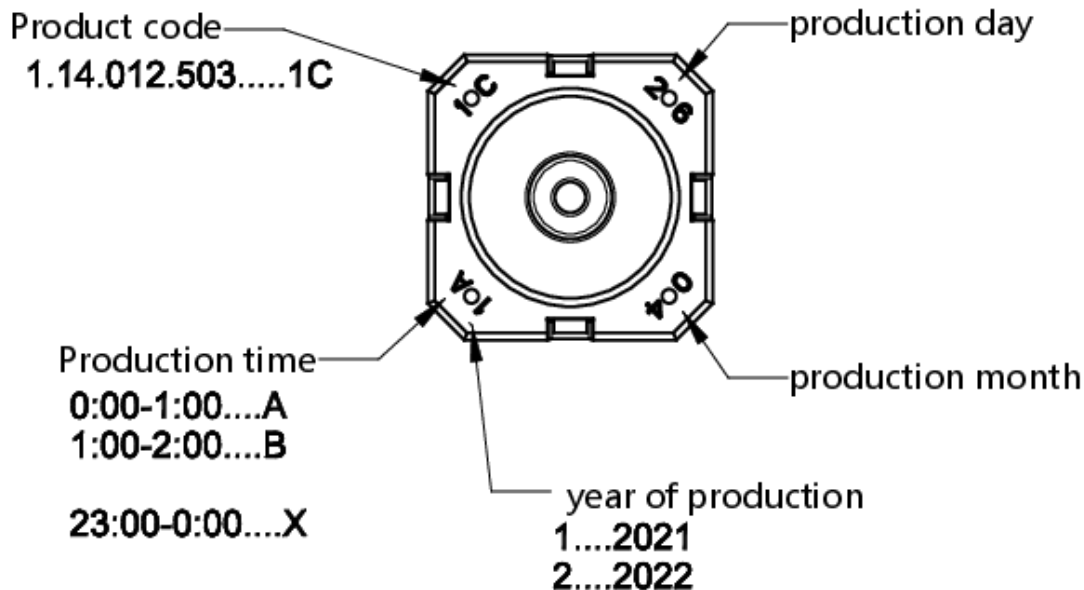


PCB-Pad
component side

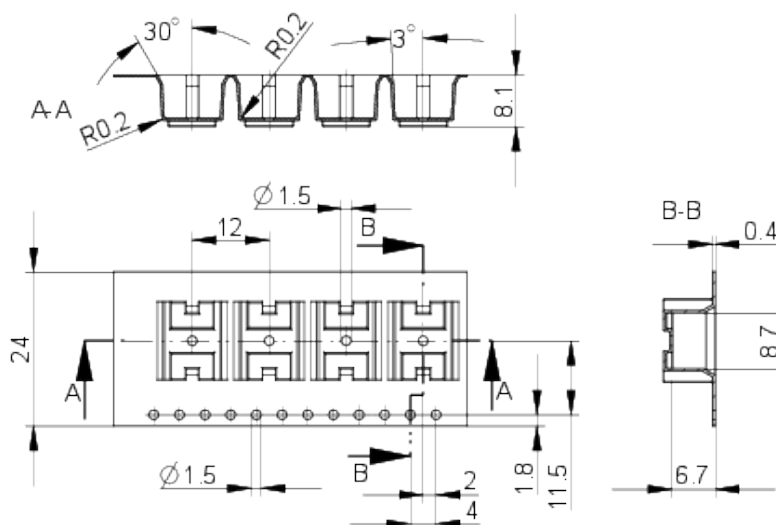
Schematic diagram



Product labeling drawing



Packaging drawing



mounting

RAFI soldering profile for ROHS compliant reflow components



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| 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.) (t_s) | 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_P) | max. 260°C (+0°C) |
| Time within peak temperature - 5°C (t_p) | 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 Jecdec J-STD-020D.

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