

## RACON 8, THT outside, $3.3 \pm 0.6$ 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
- 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.                | 90 °C  |
| Storage temperature, min.                  | -50 °C |
| Storage temperature, max.                  | 85 °C  |
| illuminated                                | No     |
| Soldering time for manual soldering, max.  | 5 sec  |
| Soldering temperature for manual soldering | 350 °C |

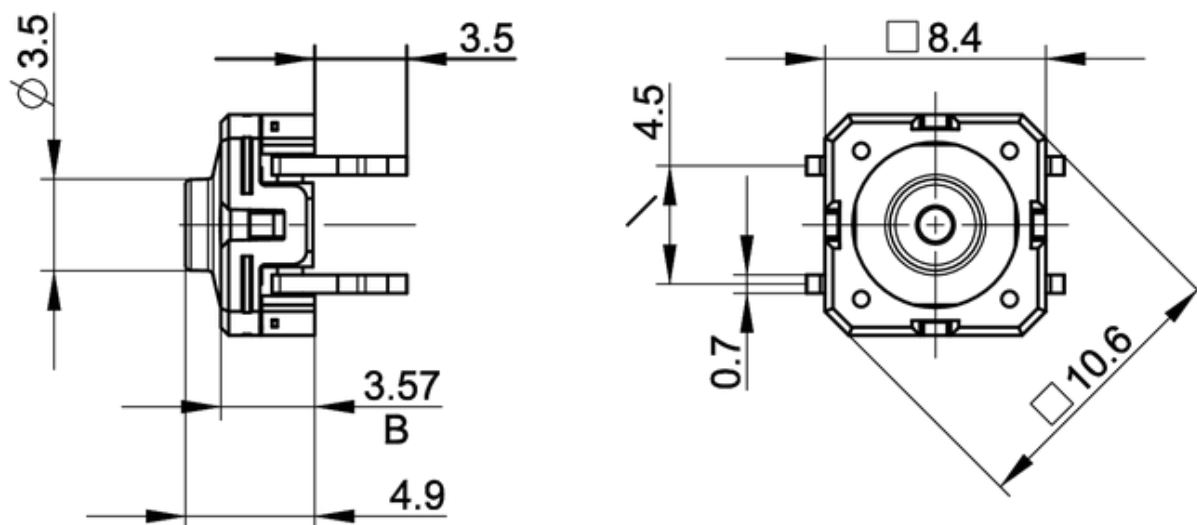
#### direct links

- [RAFI eCatalog](#)

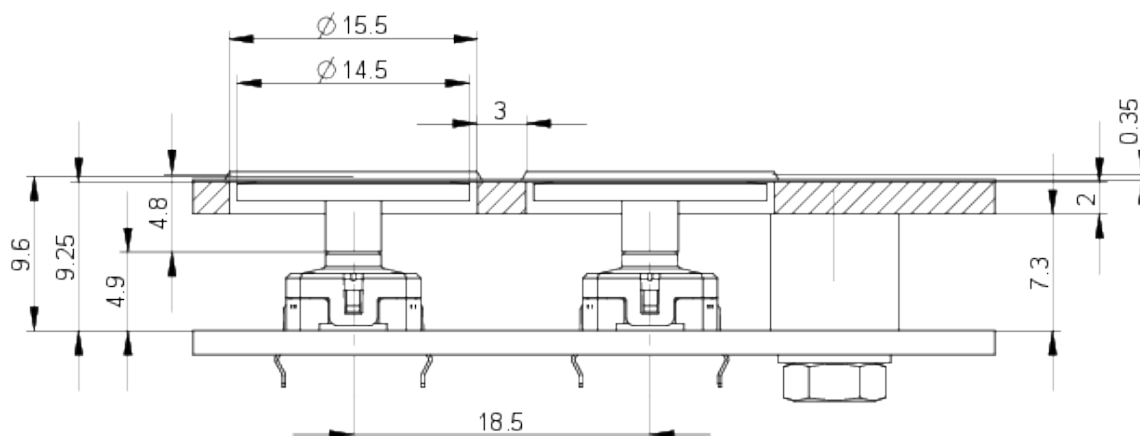
|                                                             |                                                        |
|-------------------------------------------------------------|--------------------------------------------------------|
| Soldering temperature for wave soldering                    | 260 °C                                                 |
| Soldering                                                   | Manual / wave                                          |
| Solder heat resistance according to standard                | DIN EN 60068-2-20                                      |
| Packaging                                                   | Tube                                                   |
| Packaging unit                                              | 60 pcs.                                                |
| net weight                                                  | 0.7 g                                                  |
| Operating life                                              | 1,000,000 cycles                                       |
| B10                                                         | 1,300,000 cycles                                       |
| Degree of protection, front side, according to DIN EN 60529 | IP54<br>IPx7                                           |
| Degree of protection, rear side, according to DIN EN 60529  | IP54<br>IPx7                                           |
| MSL Moisture Sensitivity Level                              | 1                                                      |
| Corrosive gas testing according to standard                 | Yes                                                    |
| MOQ order                                                   | 600 pcs.                                               |
| RoHS compliant                                              | Yes                                                    |
| REACH compliant                                             | Yes                                                    |
| Component material                                          | Elastomer                                              |
| Product code                                                | A1                                                     |
| <b>&gt; mounting diameters</b>                              |                                                        |
| Outside dimension, length                                   | 8.4 mm                                                 |
| Outside dimension, width                                    | 8.4 mm                                                 |
| Outside dimension, height                                   | 8.4 ± 0.1 mm                                           |
| Installation height                                         | 4.9 ± 0.1 mm                                           |
| Grid, min.                                                  | 8.9 x 12.7 mm                                          |
| <b>&gt; mechanical data</b>                                 |                                                        |
| Actuation function                                          | momentary contact function                             |
| Operating force, max.                                       | 8 N                                                    |
| Operating force, min.                                       | 3.3 ± 0.6 N                                            |
| Switching travel                                            | 0,34 <sup>±0,1</sup> mm                                |
| Contact function                                            | 1 NO                                                   |
| Contact system                                              | Snap-action contact<br>SPST - Single Pole Single Throw |
| Contact material                                            | Gold                                                   |
| Solderability                                               | Yes                                                    |
| Terminal on the rear                                        | THT outward                                            |
| <b>&gt; electrical data</b>                                 |                                                        |
| 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

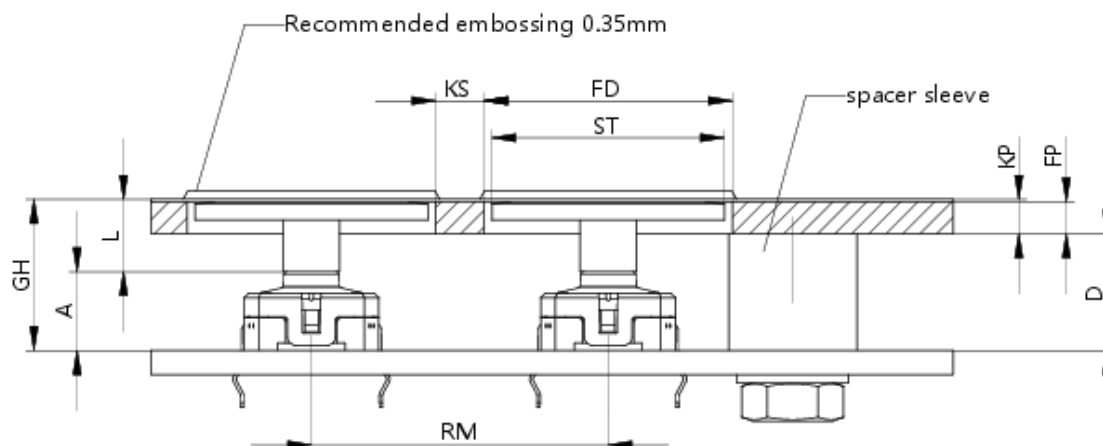
### Dimensioned drawing



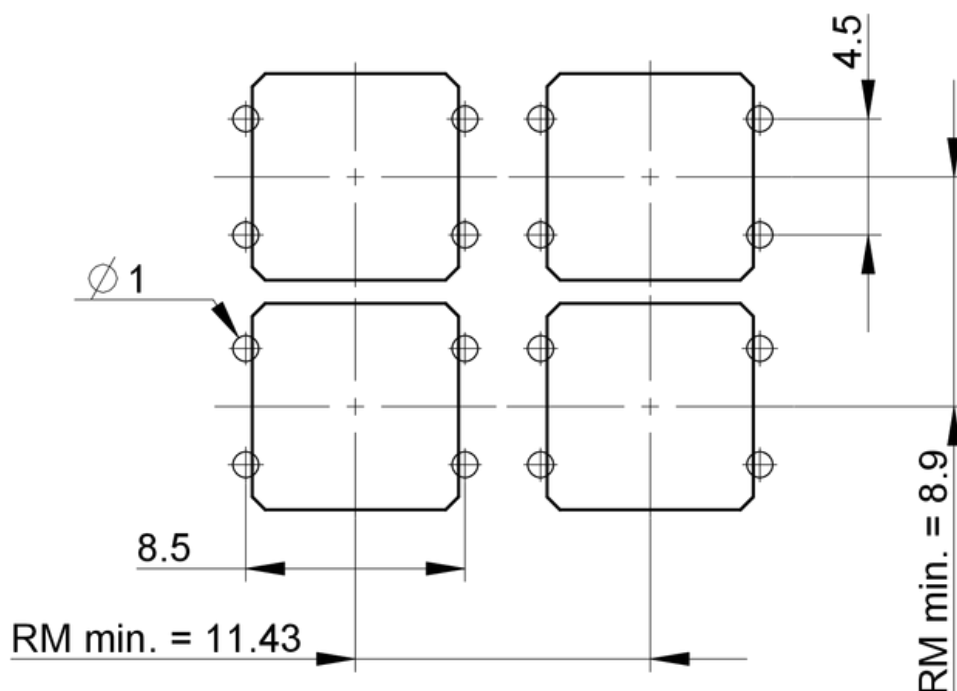
### System drawing



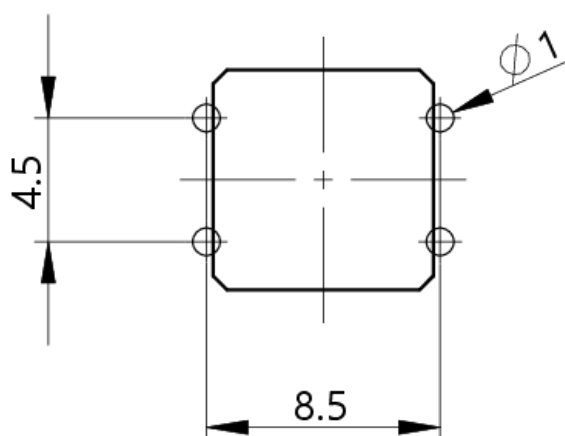
## System drawing



## PCB drawing

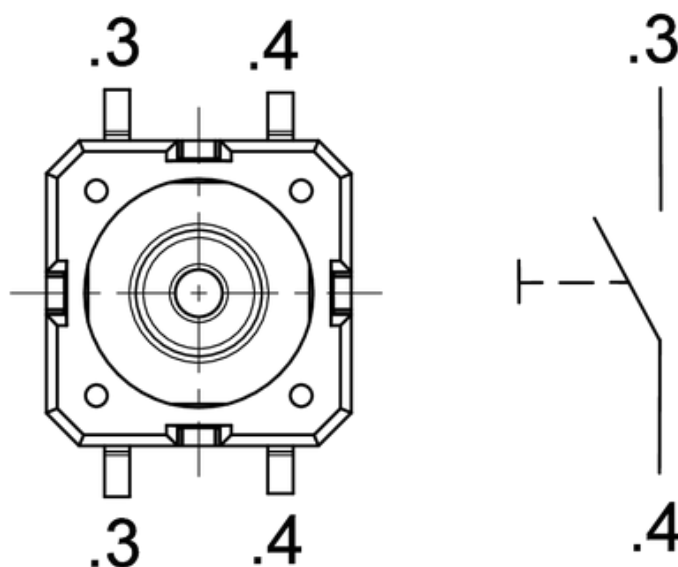


PCB drawing



PCB hole pattern  
component side

Schematic diagram



**Product labeling drawing**