

# **RACON 12 S, THT inside, 6.8 ± 1.6 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
- > sealable (tested media see Downloads)

# $c \in$

### description

Our top-quality RACON 12 tactile switches – in the dimensions 12 x 12 mm – feature an unmistakeable click, high switching reliability, a sealed contact system and castability. 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 12 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

5 sec

> RAFI eCatalog

direct links

Operating temperature, min. -40 °C
Operating temperature, max. 90 °C
Storage temperature, min. -50 °C
Storage temperature, max. 90 °C
illuminated No

Soldering time for manual

soldering, max.

The information in this data 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.

RAFI GmbH & Co. KG



Soldering temperature for manual

soldering

Soldering temperature for wave

soldering

Soldering Manual / wave

350 °C

260 °C

Solder heat resistance according DIN EN 60068-2-20

to standard

Packaging Tube
Packaging unit 45 pcs.
net weight 1.2 g

Operating life 1,000,000 cycles B10 1,300,000 cycles

Degree of protection, front side, according to DIN EN 60529 IPx7

Degree of protection, rear side, according to DIN EN 60529 IPx7

MSL Moisture Sensitivity Level 1

Corrosive gas testing according to Yes

standard

MOQ order 450 pcs.

RoHS compliant Yes

REACH compliant Yes

Component material Elastomer

Product code BZ

> mounting diameters

Outside dimension, length 12 mm
Outside dimension, width 12 mm

Installation height  $5.05 \pm 0.1 \text{ mm}$ Grid, min.  $12.50 \times 15.24 \text{ mm}$ 

> mechanical data

Actuation function momentary contact function

Operating force, max. 10 N

Operating force, min.  $6.8 \pm 1.6 \text{ N}$ Switching travel  $0.7 \pm 0.12 \text{ mm}$ 

Contact function 1 NO

Contact system Snap-action contact

SPST - Single Pole Single Throw

Contact material Gold Solderability Yes

Terminal on the rear THT inward

> electrical data

Rated voltage, min.

Rated voltage, max.

Rated current, min.

Rated current, max.

O.1 A

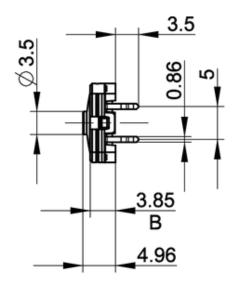
Rated power, max.

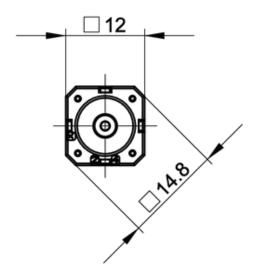
1 W



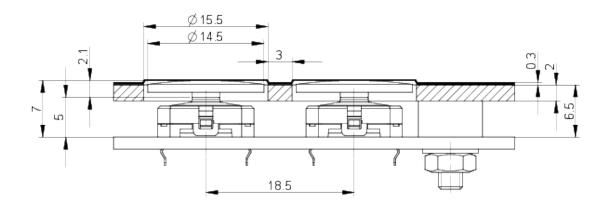
# drawings

### **Dimensioned drawing**



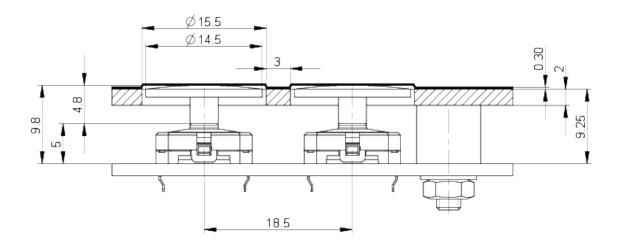


#### System drawing



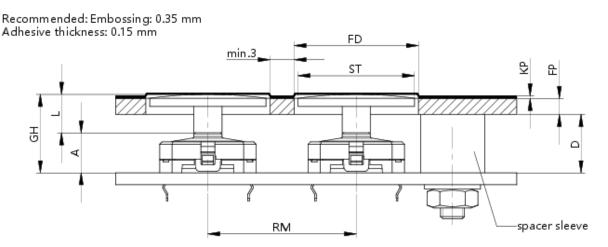


#### System drawing



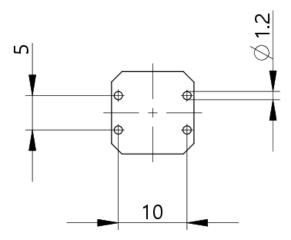
#### System drawing

THT connection internal



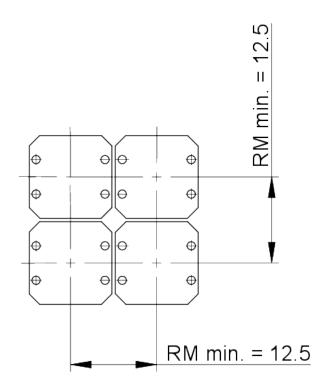


#### **PCB** drawing



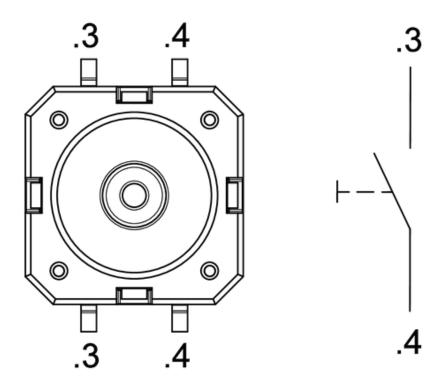
PCB hole pattern component side

#### **PCB** drawing





#### Schematic diagram



## **Product labeling drawing**

