

RACON 12, SMT, 3.6 ± 0.7 N, 1 NO

DISCONTINUED



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

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description

Our top-quality RACON 12 tactile switches – in the dimensions 12 x 12 mm – feature an unmistakeable 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 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

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Color blue
Operating temperature, min. -40 °C

Operating temperature, max. 90 °C Storage temperature, min. -50 °C Storage temperature, max. 90 °C

illuminated No Soldering Reflow

Solder heat resistance according

to standard

Packaging Blister
Packaging unit 750 pcs.
net weight 0.8 g

direct links

> RAFI eCatalog

DIN EN 60068-2-58



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

MSL Moisture Sensitivity Level 1
Corrosive gas testing according to Yes

standard

MOQ order 750 pcs.

RoHS compliant Yes

REACH compliant Yes

Component material Elastomer

Product code C1

> mounting diameters

Outside dimension, length 12 mm

Outside dimension, width 12 mm

Outside dimension, height $4.95^{\pm0.1}$ mm

Installation height $4.95^{\pm0.1}$ mm

Grid, min. 12.50 x 15.24 mm

> mechanical data

Actuation function momentary contact function

Operating force, max. 8 N

Operating force, min. $3.6 \pm 0.7 \text{ N}$ Switching travel $0.61^{\pm 0.1} \text{ mm}$

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.

Rated current, min.

Rated current, max.

O.1 A

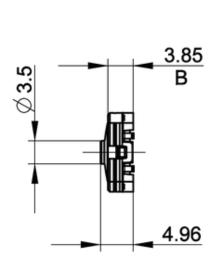
Rated power, max.

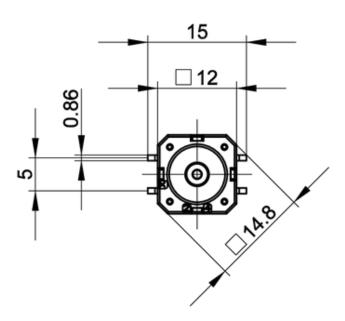
1 W



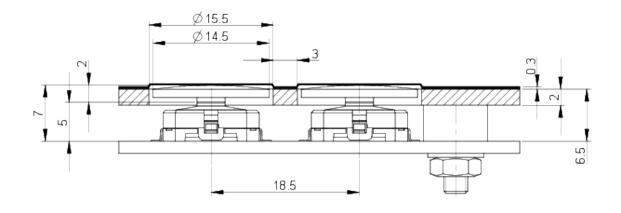
drawings

Dimensioned drawing



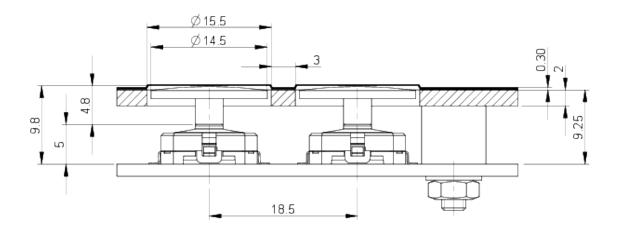


System drawing



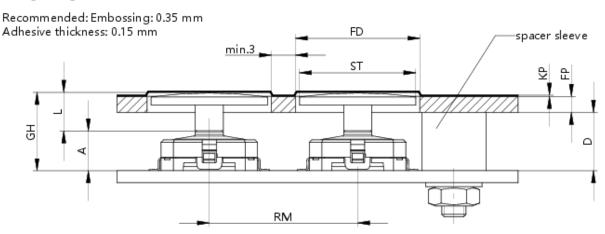


System drawing



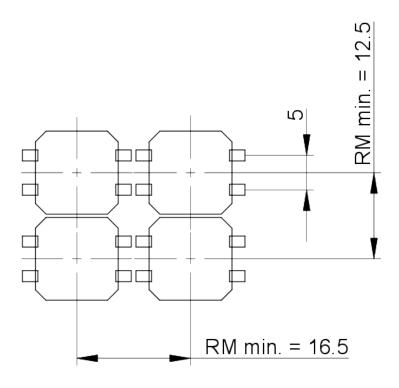
System drawing

SMT gullwing connection

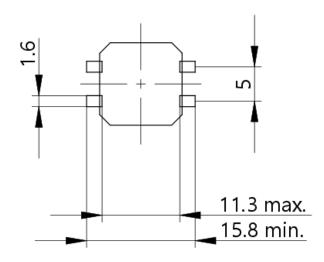




PCB drawing



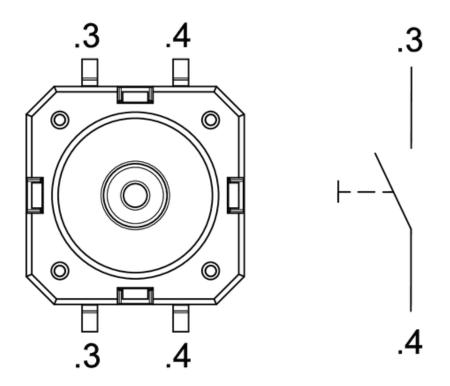
PCB drawing



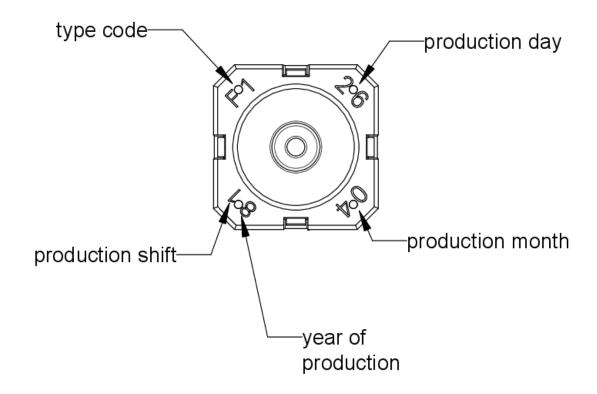
PCB-Pad component side



Schematic diagram

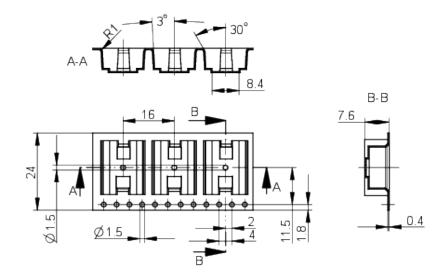


Product labeling drawing





Packaging drawing



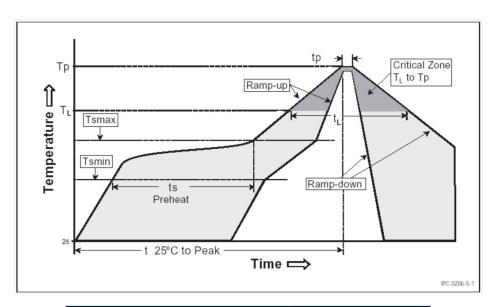


mounting

RAFI soldering profile for ROHS compliant reflow components



Publication date: October 7, 2021



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