

RACON 8, SMT, 4.8 ± 0.8 N, 1 NO

LBL\_NRFND



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

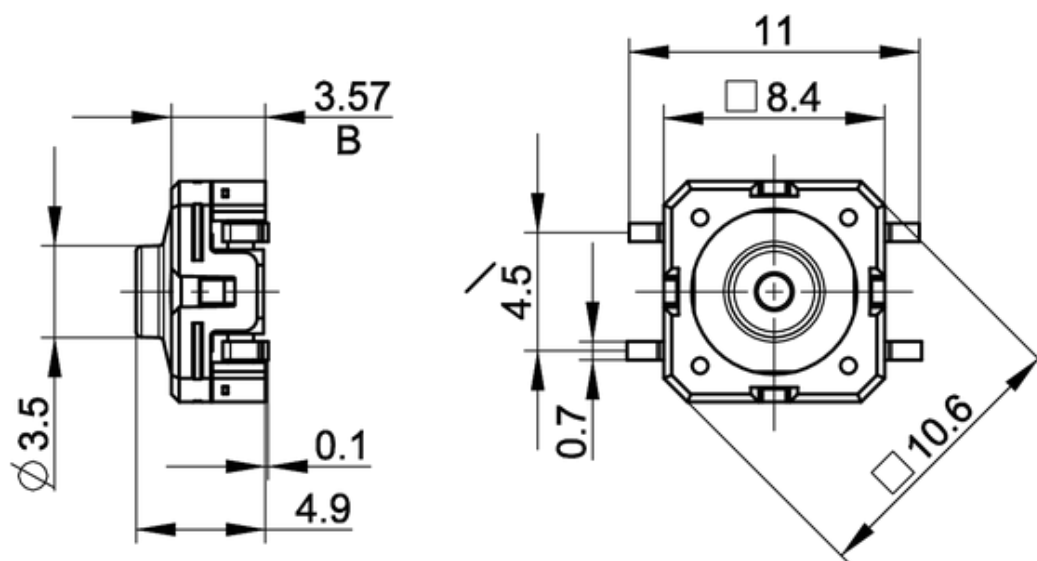
➤ general

Color	blue	direct links
Operating temperature, min.	-40 °C	
Operating temperature, max.	90 °C	➤ RAFI eCatalog
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	
Packaging unit	1,000 pcs.	
Net weight	0.5 g	
Operating life	1,000,000 cycles	
B10	1,300,000 cycles	
Degree of protection, front side, according to DIN EN 60529	IP54 IPx7	
Degree of protection, rear side, according to DIN EN 60529	IP54 IPx7	

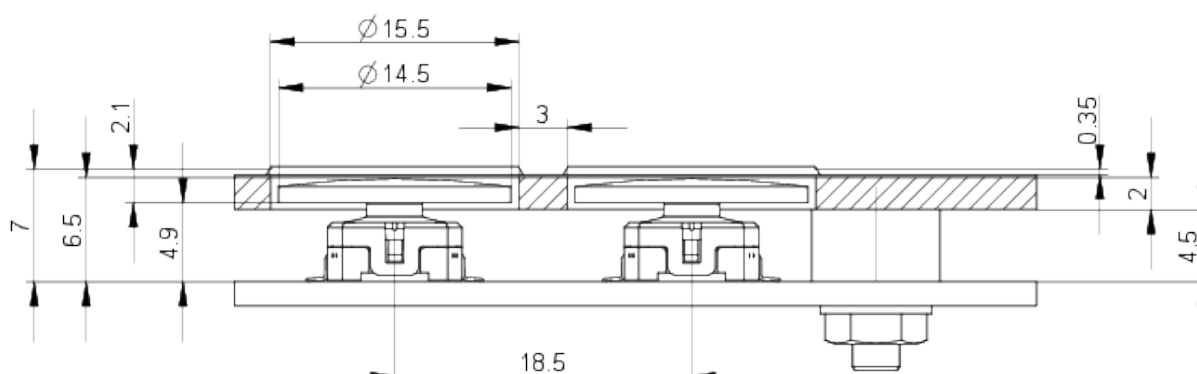
MSL Moisture Sensitivity Level	1
Corrosive gas testing according to standard	Yes
Minimum order quantity (MOQ)	1,000 pcs.
RoHS compliant	Yes
REACH compliant	Yes
Component material	Elastomer
Product code	C2
Country of origin	DE
> <b>mounting diameters</b>	
Outside dimension, length	8.4 mm
Outside dimension, width	8.4 mm
Installation height	4.95 ± 0.1 mm
Grid, min.	8.9 x 12.7 mm
> <b>mechanical data</b>	
Terminal on the rear	SMT
Actuation function	momentary contact function
Operating force, max.	8 N
Operating force, min.	4.8 ± 0.8 N
Contact function	1 NO
Contact system	Snap-action contact SPST - Single Pole Single Throw
Contact material	Gold
Solderability	Yes
Switching travel	0,42±0,1 mm
> <b>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

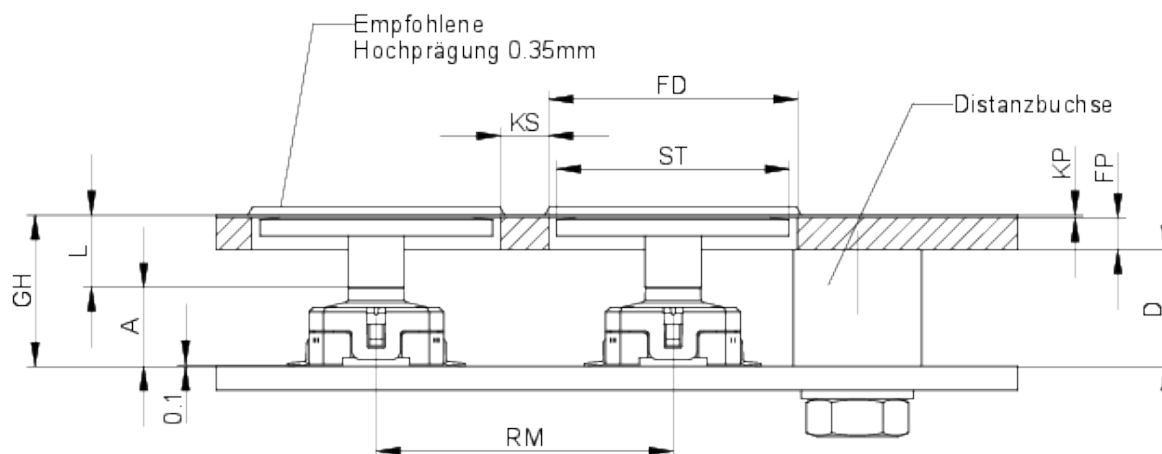
### Dimensioned drawing



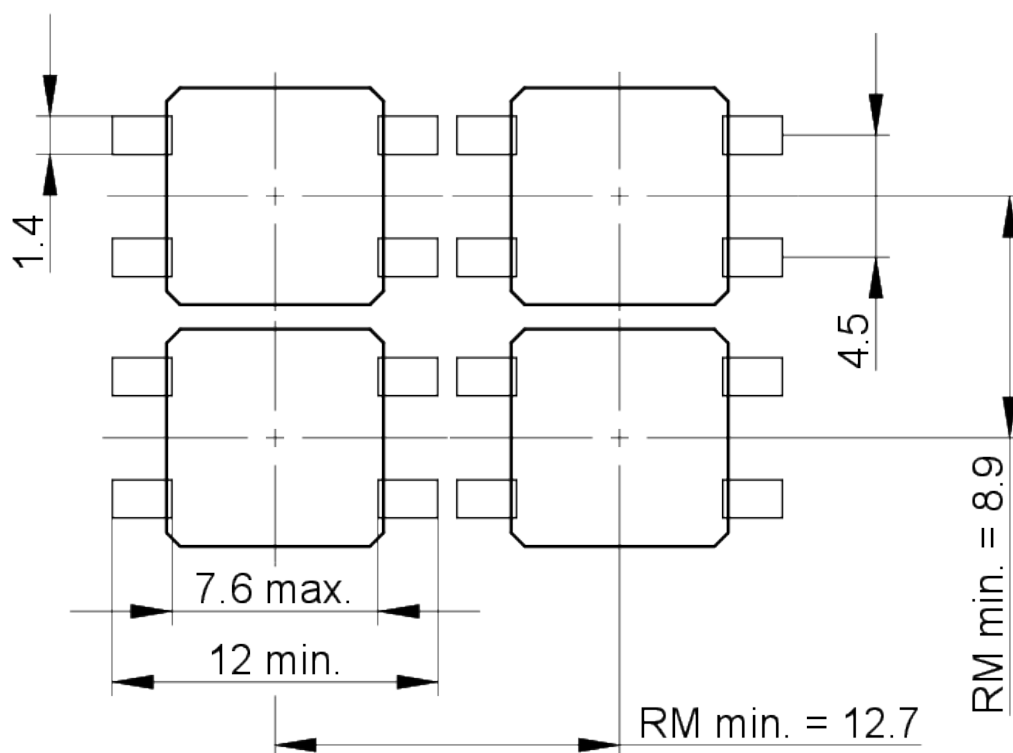
### System drawing



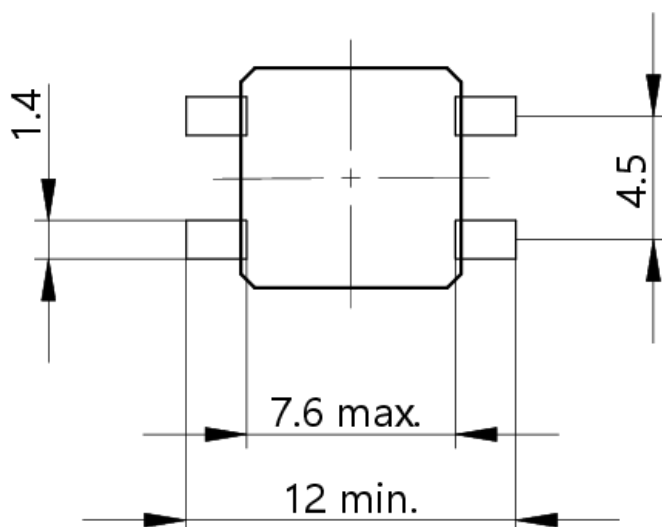
## System drawing



## PCB drawing

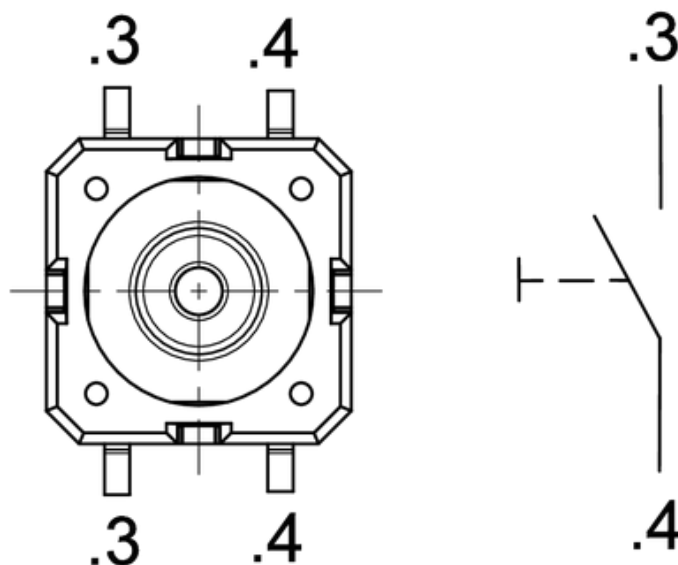


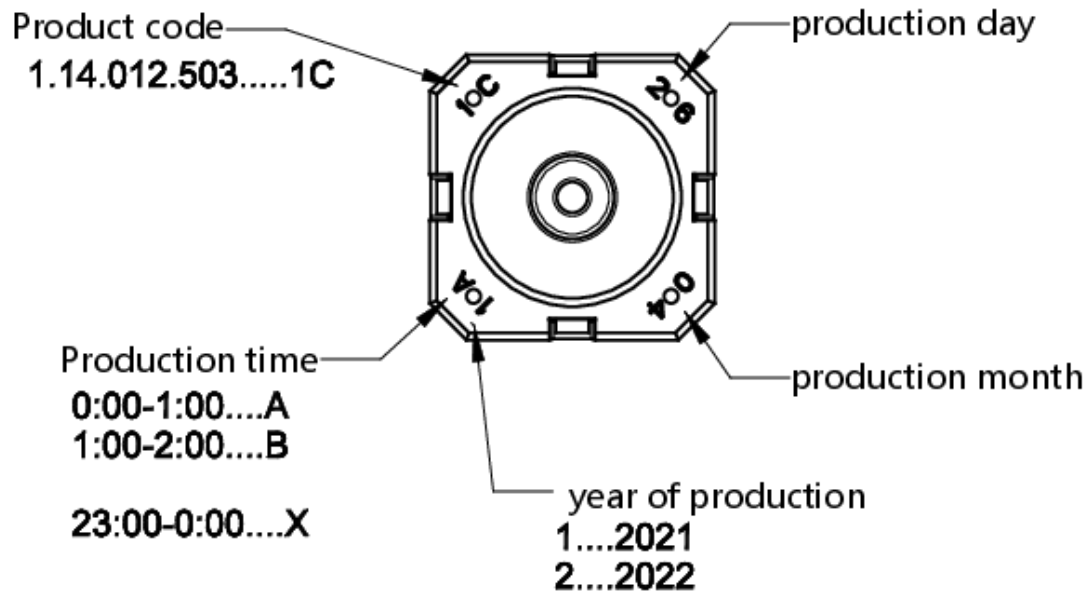
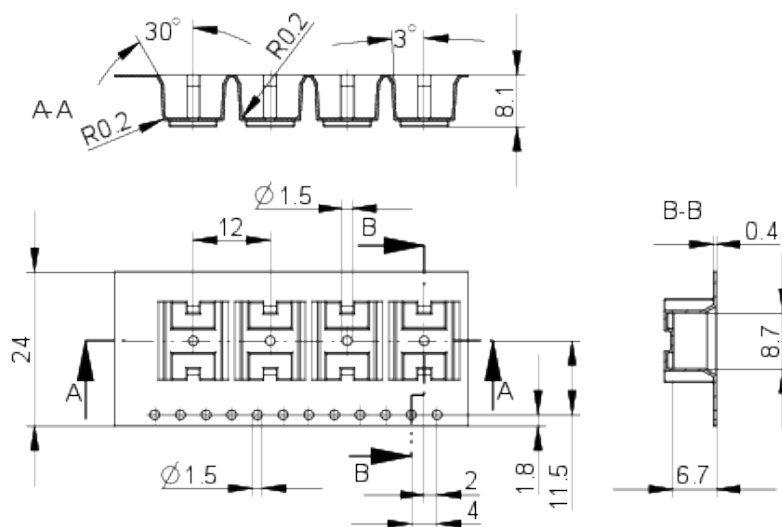
## PCB drawing



PCB-Pad  
component side

## Schematic diagram



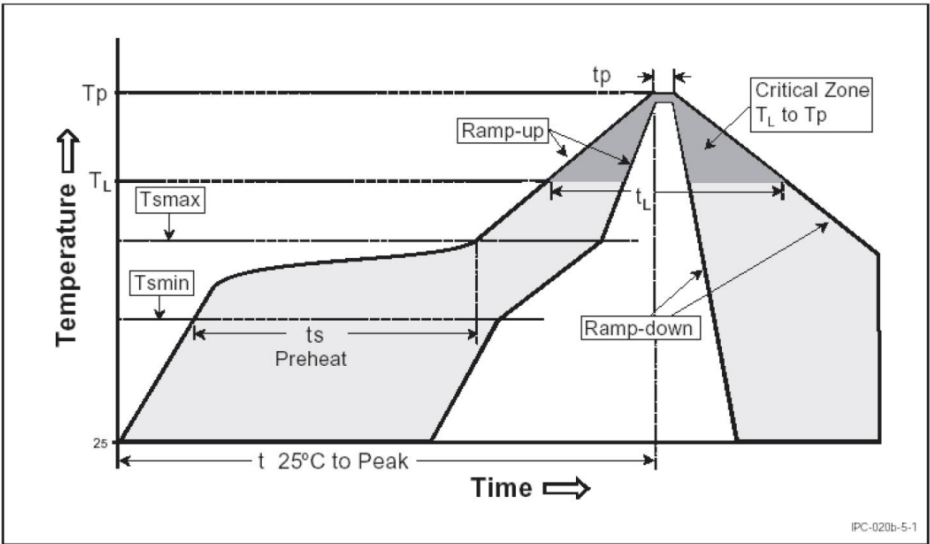
**Product labeling drawing****Packaging drawing**

mounting

RAFI soldering profile for ROHS compliant  
reflow components

RAFI

Publication date: October 7, 2021



Parameter	RAFI values
Gradient (T <sub>L</sub> to T <sub>P</sub> )	max. 3°C / s
<b>Preheating zone</b>	
Minimum temperature (T <sub>smin</sub> )	150°C
Maximum temperature (T <sub>smax</sub> )	200°C
Time (from min. to max.) (ts)	60 - 120 s
Gradient (T <sub>smax</sub> to T <sub>L</sub> )	max. 3°C / s
Time over melting temperature (T <sub>L</sub> ) time (tl)	217°C 60 – 150 s
Peak temperature (T <sub>P</sub> )	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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RAFI GmbH & Co. KG  
Ravensburger Str. 128-134, 88276 Berg / Ravensburg  
GERMANY – [www.rafi-group.com](http://www.rafi-group.com)