

## RACON 8, SMT, 4,8 ± 0,8 N, 1 S



### Haupt- / Anwendungsgebiete

- › Messen-Steuern-Regeln
- › Maschinen- und Anlagenbau
- › Automotive
- › Elektromedizin

### Spezielle Features

- › Goldkontakte, sicheres Schalten bei niedrigen Strömen
- › Besonderes taktiles Feedback
- › Unterschiedliche Betätigungskräfte
- › Variable Bauhöhen durch Stößel
- › Anschlusstechnik: SMT oder THT
- › Traceability durch Produktkennzeichnung



## Beschreibung

Unsere hochwertigen Kurzhubtaster RACON 8 in den Abmessungen 8,4 x 8,4 mm zeichnen sich durch einen unverwechselbaren Tastenklick, hohe Schaltsicherheit und ein dichtes Kontaktsystem aus. Dadurch wurde der RACON zum Standard in vielen Branchen. Ob in Automotive-Applikationen, Systemen mit Tastenkappen oder Folientastaturen: der RACON überzeugt in der THT- oder SMT-Variante – auch in Ihrer Anwendung.

Die RACON 8 Kurzhubtaster können einzeln, in Reihen oder als Tastenfelder angeordnet werden. Für den Einsatz unter Folie sollten die RACON-Taster mit Stößeln kombiniert werden. Geeignet für die wichtigsten Lötverfahren.

- › Wellen-Lötbad für THT-Versionen
- › Reflow-Löten für SMT-Versionen
- › Dampfphasen-Löten für SMT-Versionen
- › Handlötung
- › Verarbeitung der SMT-Ausführungen mit SMT-Bestückungsautomaten
- › IMDS-Eintrag

## Technische Daten

### › Allgemein

Farbe	blau
Arbeitstemperatur, min.	-40 °C
Arbeitstemperatur, max.	90 °C
Lagertemperatur, min.	-50 °C
Lagertemperatur, max.	85 °C
beleuchtbar	nein
Lötverfahren	Reflow
Lötwärmebeständigkeit nach Norm	DIN EN 60068-2-58

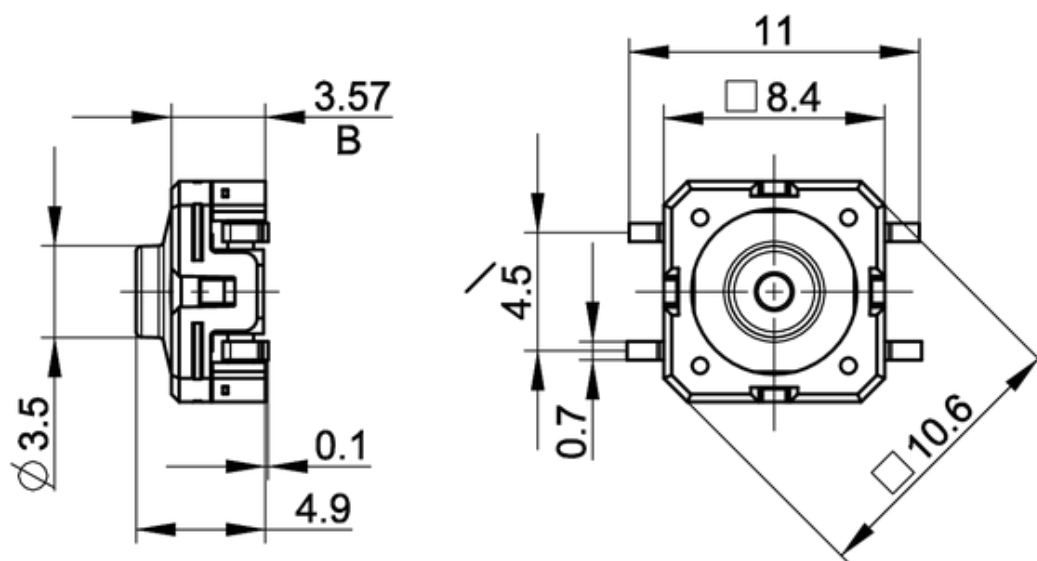
### Direkte Links

- › [RAFI eCatalog](#)

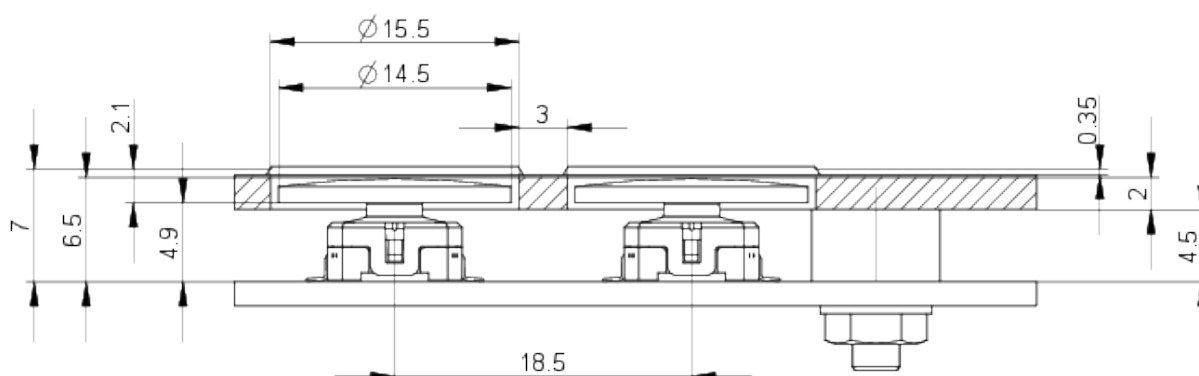
Verpackung	Blister
Verpackungseinheit	1.000 Stück
Nettogewicht	0,5 g
Lebensdauer	1.000.000 Zyklen
B10	1.300.000 Zyklen
Schutzart frontseitig gem. DIN EN 60529	IP54 IPx7
Schutzart rückseitig gem. DIN EN 60529	IP54 IPx7
MSL Moisture Sensitivity Level	1
Schadgasprüfung nach Norm	ja
MOQ Auftrag	1.000 Stück
RoHS konform	ja
REACH konform	ja
Material der Komponente	Elastomer
Produktcode	C2
<b>&gt; Einbaumaße</b>	
Außenmaß Länge	8,4 mm
Außenmaß Breite	8,4 mm
Einbauhöhe	4,95 ± 0.1 mm
Raster, min.	8.9 x 12.7 mm
<b>&gt; Mechanische Kennwerte</b>	
Betätigungsfunktion	tastend
Betätigungskraft, max.	8 N
Betätigungskraft, min.	4,8 ± 0.8 N
Schaltweg	0,42±0,1 mm
Kontaktfunktion	1 S
Kontaktsystem	Sprungkontakt SPST - Single Pole Single Throw
Kontaktwerkstoff	Gold
Lötbarkeit	Ja
Anschluss rückseitig	SMT
<b>&gt; Elektrische Kennwerte</b>	
Schaltspannung, min.	0,02 V
Schaltspannung, max.	35 V
Schaltstrom, min.	0,00001 A
Schaltstrom, max.	0,1 A
Schaltleistung, max.	1 W

## Zeichnungen

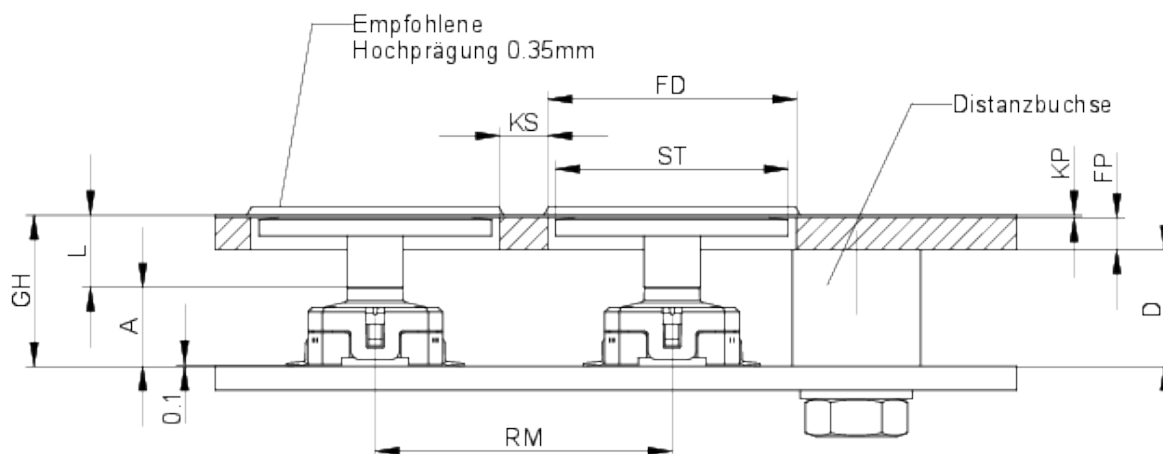
### Maß-Zeichnungen



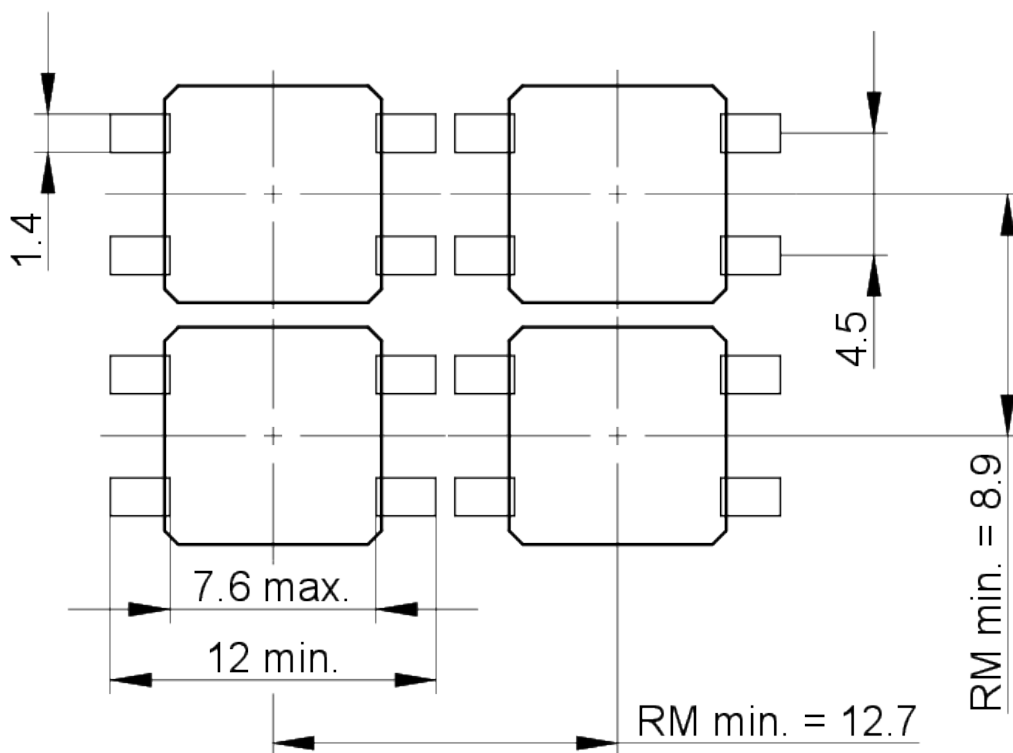
### System-Zeichnung



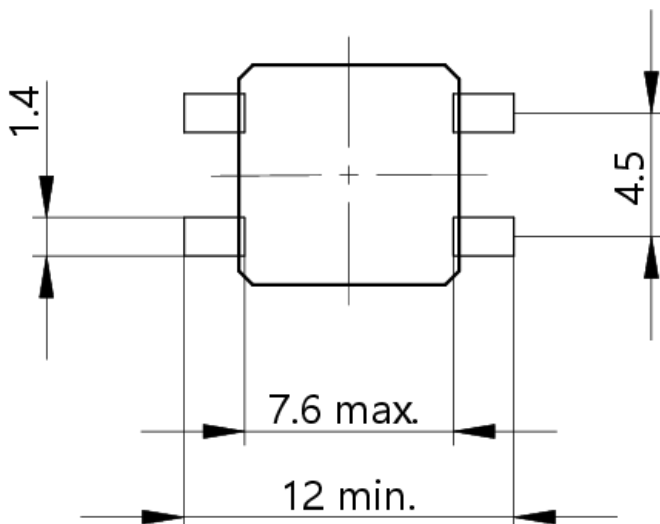
**System-Zeichnung**



**Leiterplatten-Zeichnung**

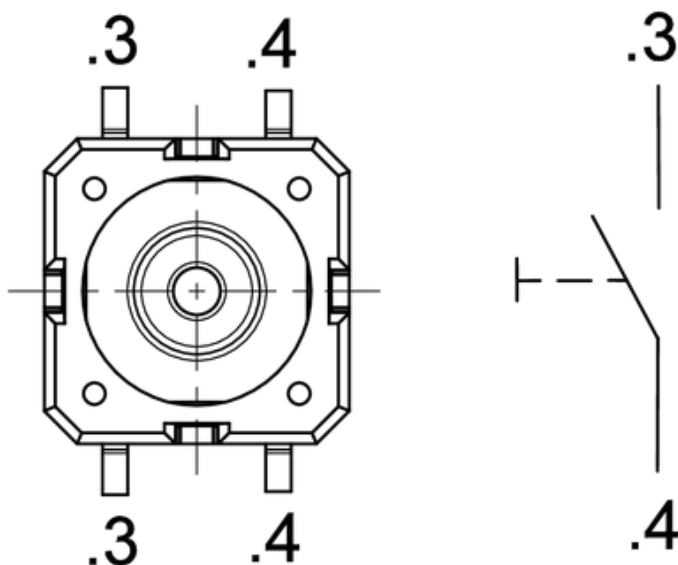


Leiterplatten-Zeichnung

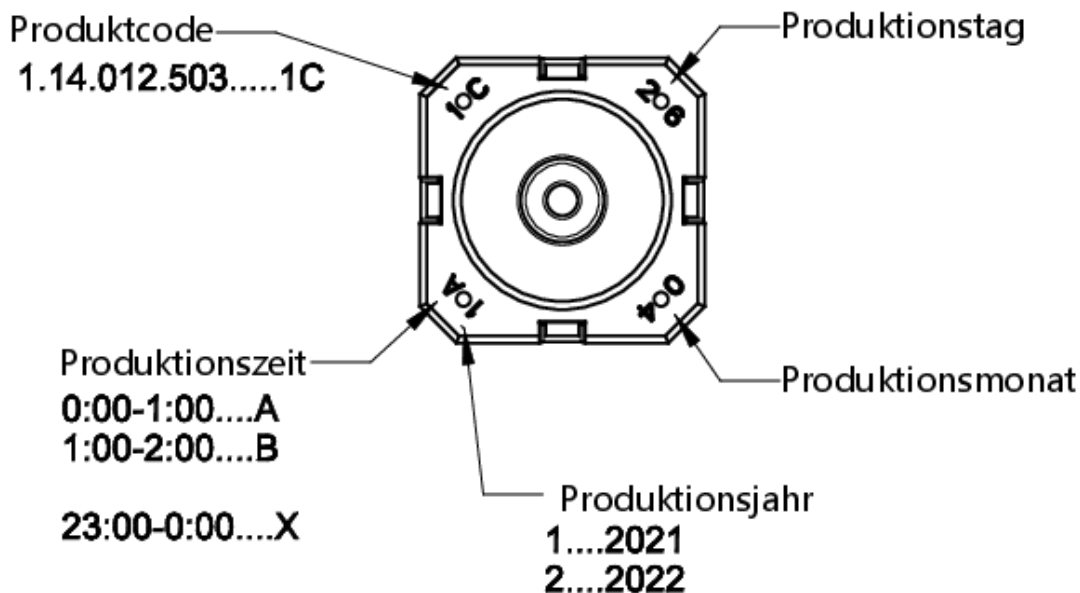


PCB-Pad  
Bestückungsseite

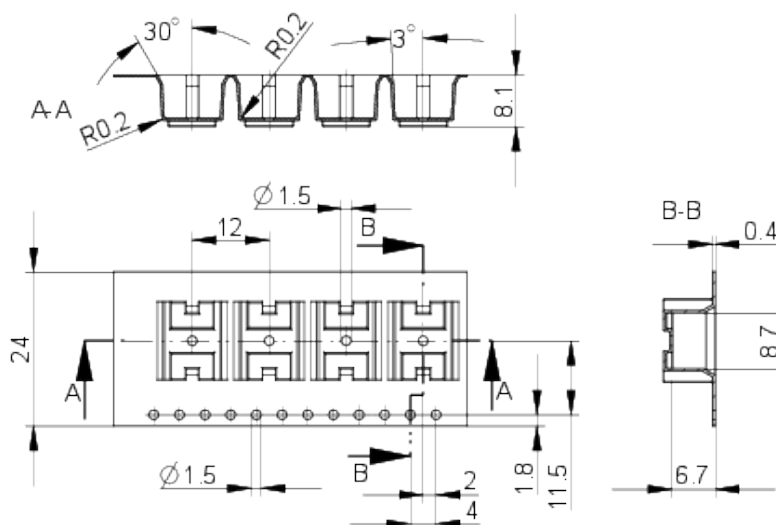
Schaltschema-Zeichnung



Produktkennzeichnung-Zeichnung



Verpackungs-Zeichnung

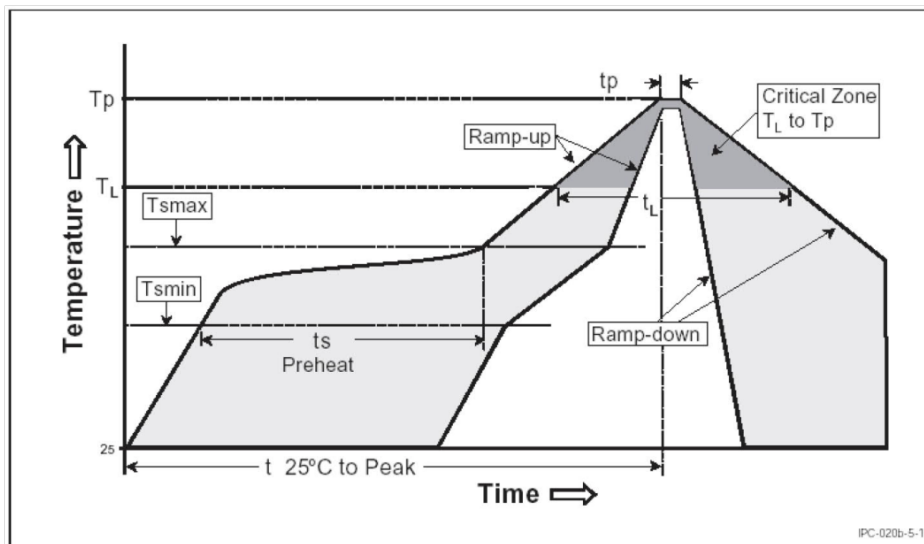


## Montage

### 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
<b>Preheating zone</b>	
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.

The information in this sheet only contains general descriptions and / or performance features, which may not apply precisely as described to the respective application, and which may 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. Subject to change and errors excepted. Details about delivery times and availability are noncommittal and have no legal force.

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## Medium Robust Electronics



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# RACON 8

Valid for all variants RACON 8, 1.14.100.5XX-9XX

### Approved potting compounds

- WEVO-CHEMIE GmbH WEVOPUR 7210 FL/WEVONAT 507  
WEVOPUR PD4431 FL/WEVONAT 300
- STOCKMAIER URETHANES GmbH & Co.KG Stobicast® L768.16 Polyol/Isocyanat

#### Important note

Maximum potting height B must not be exceeded.

### Approved circuit board protection

- Lackwerke Peters GmbH & Co.KG ELPEGUARD® SL 1307

#### Important note

If the tactile switch is completely painted, the paint may peel off the elastomer of the tactile switch during the first few actuations. Press the tactile switch only after the paint has hardened. We recommend leaving out the elastomer area when painting to prevent detachment.

- TIEFCO Coating Company 3M™ Novec™ 1700

#### Important note

After coating, the contact resistance can increase. After repeated actuation, the contact resistance drops again under 100 mΩ.

#### General remark:

The potting, varnish and nano medium must be used in accordance with the manufacturer's technical data sheet. Actuation of the tactile switch only after the potting compound, varnish and nano medium has hardened.

Other potting compounds and processes for printed circuit board protection on request.

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