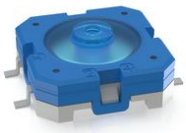
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RACON 12 ST, SMT, 3,6 ± 0,7 N, 1 S



Beschreibung

Unsere hochwertigen Kurzhubtaster RACON 12 – in den Abmessungen 12 x 12 mm – zeichnen sich durch einen unverwechselbaren Tastenklick, hohe Schaltsicherheit, ein dichtes Kontaktsystem und Vergussfähigkeit 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 12 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

CE

Technische Daten

Allgemein

Farbe	blau
Arbeitstemperatur, min.	-40 °C
Arbeitstemperatur, max.	125 °C
Lagertemperatur, min.	-50 °C
Lagertemperatur, max.	90 °C
beleuchtbar	nein
Lötverfahren	Reflow
Lötwärmebeständigkeit nach Norm	DIN EN 60068-2-58
Verpackung	Blister
Verpackungseinheit	750 Stück
Lebensdauer	1.000.000 Zyklen
B10	1.300.000 Zyklen
Schutzart frontseitig gem. ISO 20653	IP67 (IP6K7)
Schutzart rückseitig gem. ISO 20653	IP67 (IP6K7)
MSL Moisture Sensitivity Level	1

Direkte Links

- RAFI eCatalog

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Schadgasprüfung nach Norm	ja
Mindestbestellmenge (MOQ)	750 Stück
RoHS konform	ja
REACH konform	ja
Produktcode	TC

Einbaumaße

Außenmaß Länge	12 mm
Außenmaß Breite	12 mm
Einbauhöhe	4,95 ± 0.1 mm
Raster, min.	12.50 x 15.24 mm

Mechanische Kennwerte

Anschluss rückseitig	SMT
Betätigungsfunktion	tastend
Betätigungskraft, max.	8 N
Betätigungskraft, min.	3,6 ± 0.7 N
Kontaktfunktion	1 S
Kontaktsystem	Sprungkontakt SPST - Single Pole Single Throw
Kontaktwerkstoff	Gold
Lötbarkeit	Ja
Prellzeit bei 10 mm/s	<5 ms
Schaltweg	0,61 ± 0.15 mm

Elektrische Kennwerte

Schaltspannung, min.	0,02 V
Schaltspannung, max.	35 V
Schaltstrom, min.	0,00001 A
Schaltstrom, max.	0,1 A
Schaltleistung, max.	1 W

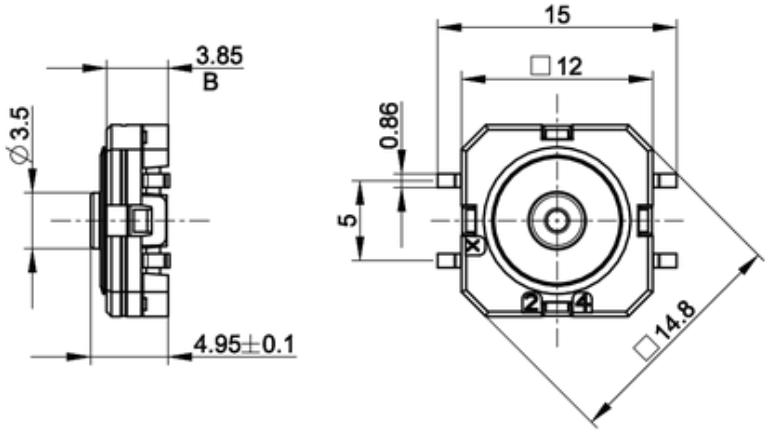
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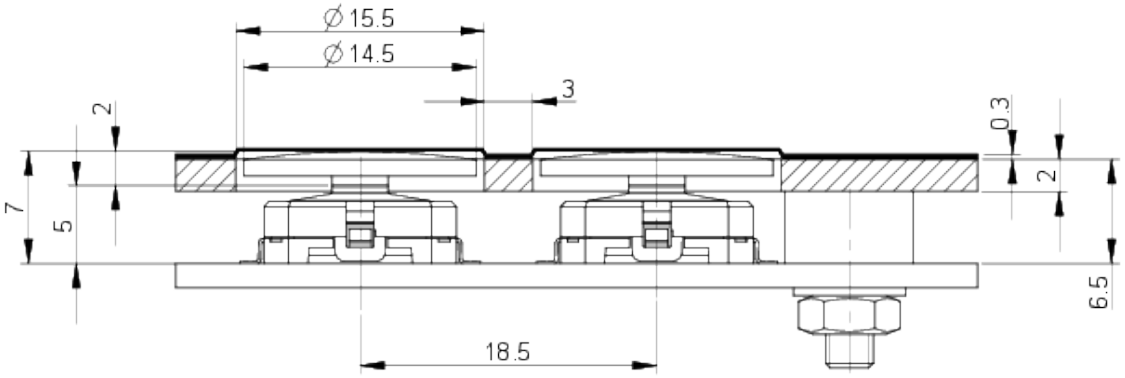
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Zeichnungen

Maß-Zeichnungen



System-Zeichnung



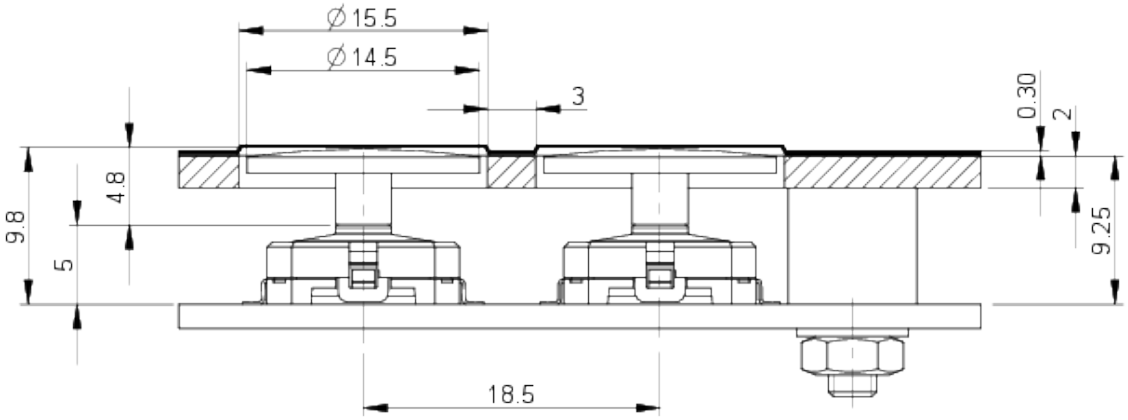
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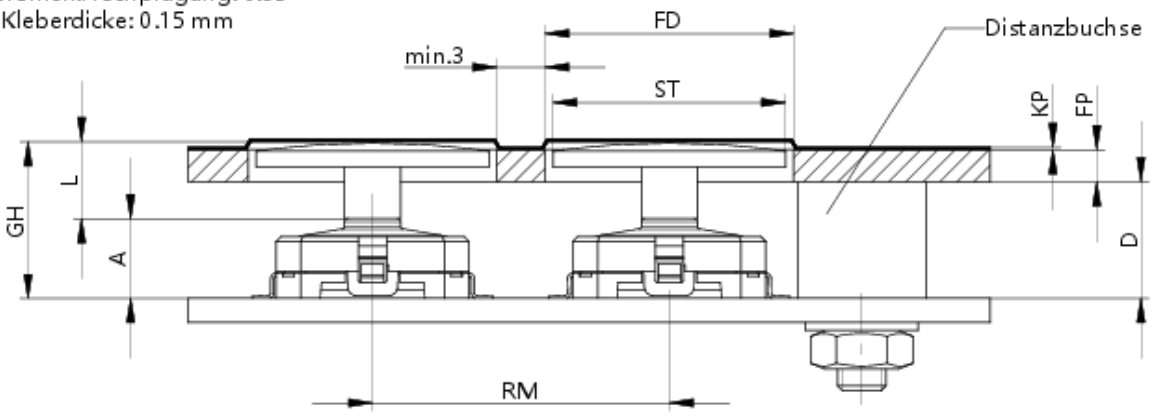
System-Zeichnung



System-Zeichnung

SMT-Gullwing-Anschluss

Empfohlen:Hochprägung: 0.35 mmKleberdicke: 0.15 mm

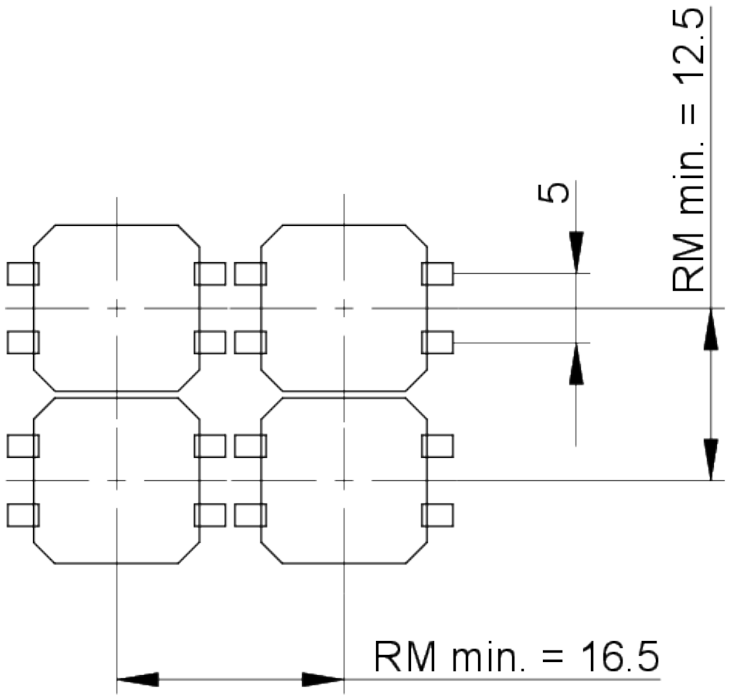


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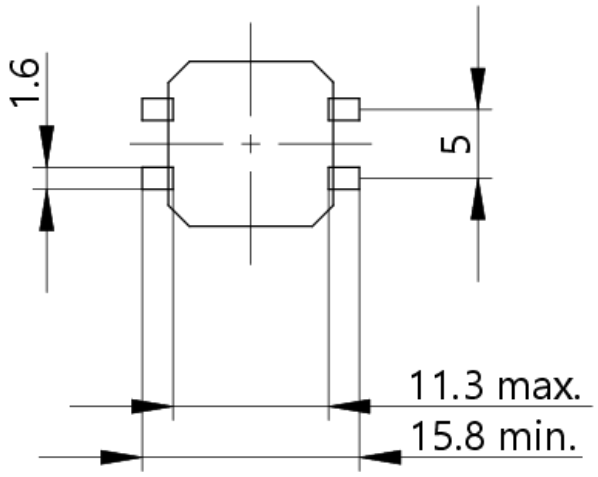
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Leiterplatten-Zeichnung



Leiterplatten-Zeichnung



PCB-Pad

Bestückungsseite

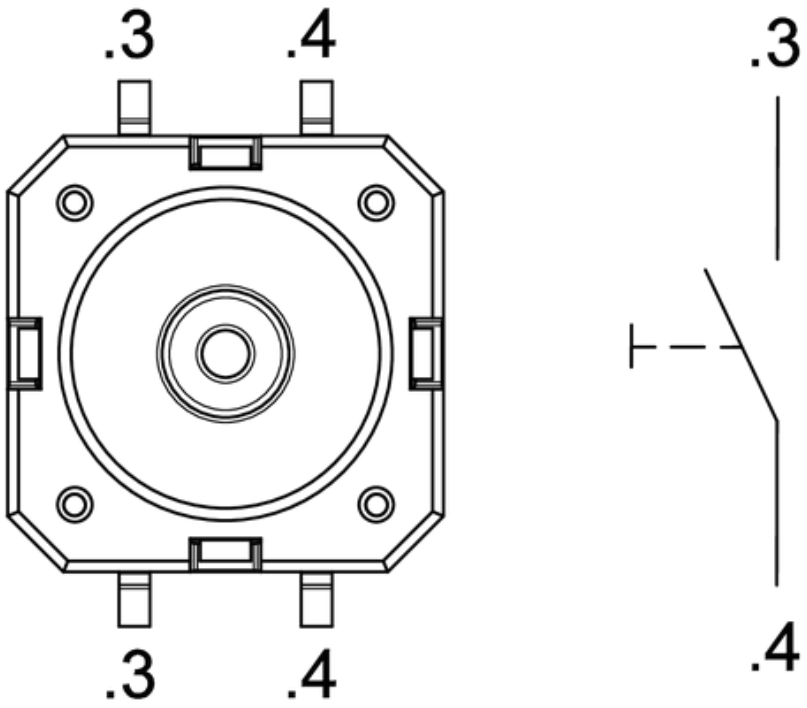
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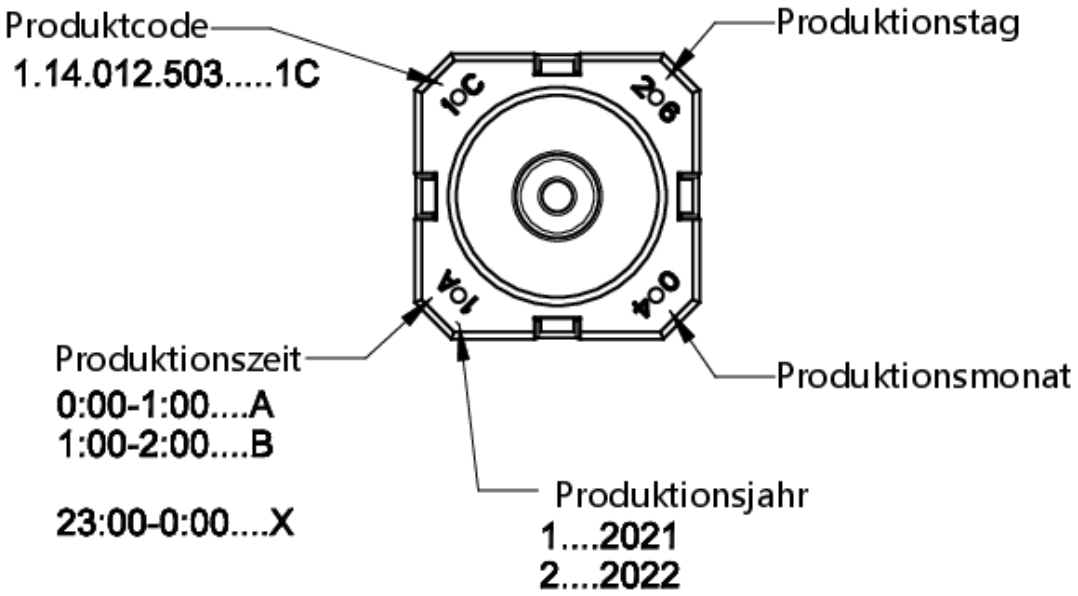
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Schaltschema-Zeichnung



Produktkennzeichnung-Zeichnung



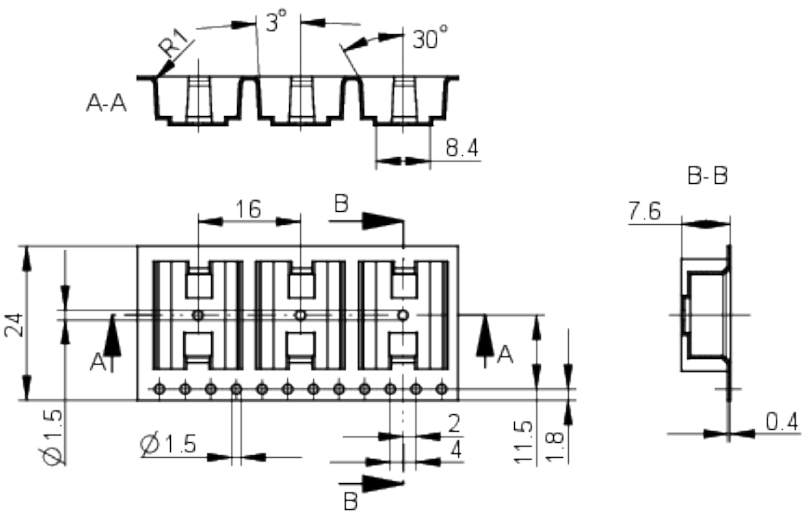
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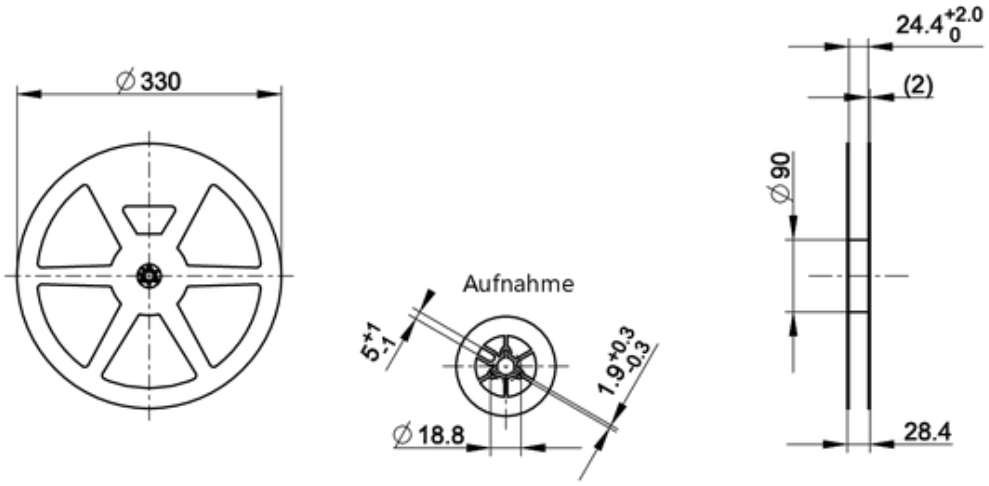
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Verpackungs-Zeichnung



Verpackungs-Zeichnung



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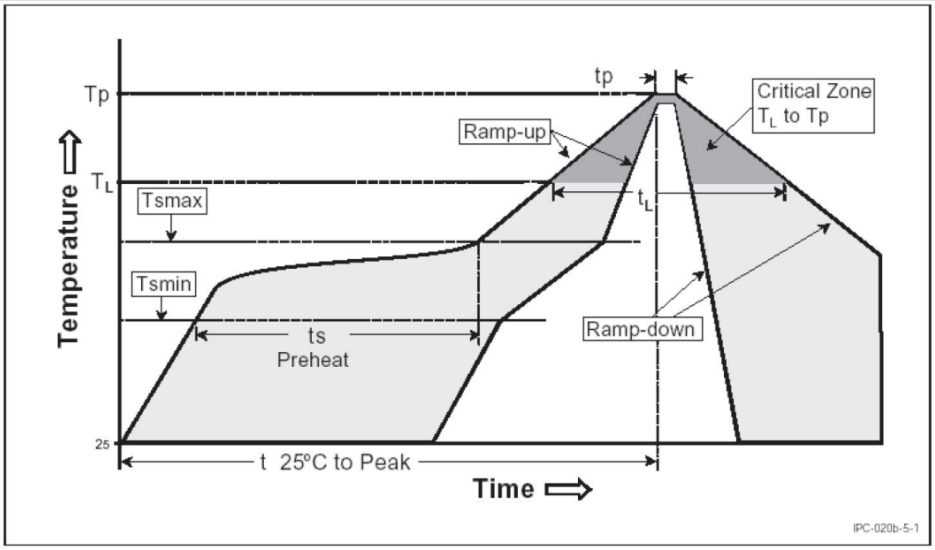
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Montage

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
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
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 (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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Media Robust Electronics

Publication date: February 13, 2025

RACON 12 ST

Valid for all variants RACON 12 ST, 1.14.112.5XX-9XX

Recommended 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.

Recommended circuit board protection

Lackwerke Peters GmbH & Co.KG	**combination of high-viscosity (HT-T) and low-viscosity coating from the ELPEGUARD® SL 1307 family**
Lackwerke Peters GmbH & Co.KG	**ELPEGUARD® SL 1800**

Important note
The conformal coating of our tactile switches must be tested in the final application. Coating that enters the tactile switch does not harden directly, so that any resulting malfunction can only be detected later.
If the tactile switch is completely coated, the coating may peel off the elastomer of the tactile switch during the first few actuations. Press the tactile switch only after the coating has hardened.
We recommend leaving out the elastomer area when coating to prevent detachment.

General remark
The suitability and use of the recommended media for potting, conformal coating and nano-coating must be qualified and approved in the final application.
The potting, conformal coating and nano-coating must be used in accordance with the manufacturer's technical data sheet.
Actuation of the tactile switch only after the potting compound, conformal coating and nano coating has complete hardened.

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

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