

RACON 12 S, SMT, 3,6 ± 0,7 N, 1 n.a.



Campi di applicazione / principali

- Misurazione-Controllo-Regolazione
- Settore meccanico ed impiantistico
- Automotive
- Elettromedicina

Funzionalità speciali

- Contatti dorati, commutazione sicura alle basse correnti
- Particolare feedback tattile
- Forze di azionamento differenti
- Altezze costruttive variabili a seconda del pistone
- Tecnica di collegamento: SMT o THT
- Traceability grazie alla codifica dei prodotti a norma
- colabile (media testati vedi Download)



Descrizione

I nostri pulsanti a corsa breve RACON 12, nelle dimensioni 12 x 12 mm, si distinguono per il loro inconfondibile scatto, per la loro elevata sicurezza di commutazione, per un fitto sistema di contatti e grado di invasatura. Questo ha fatto del RACON il pulsante standard in molti settori. In applicazioni automotive, in sistemi con cappuccio per tasti o tastiere a membrana: il RACON è apprezzato nella variante THT o SMT, e lo sarà certamente anche nella vostra applicazione.

I pulsanti a corsa breve RACON 12 possono essere disposti singolarmente, in fila o raggruppati in una tastiera. Per l'impiego sotto membrana, i pulsanti RACON devono essere combinati con pistoni. idonei per i principali metodi di brasatura.

bagno per brasatura a onda per le versioni THT

brasatura reflow per le versioni SMT

brasatura a fase di vapore per versioni SMT

brasatura a mano

Lavorazione delle esecuzioni SMT con sistemi automatici di posizionamento SMT dei componenti (macchine pick & place)

inserimento nel sistema IMDS

Dati tecnici

➤ Dati generali

Colore	blu
Temperatura di esercizio min.	-40 °C
Temperatura di esercizio max.	90 °C
Temperatura di immagazzinaggio min.	-50 °C

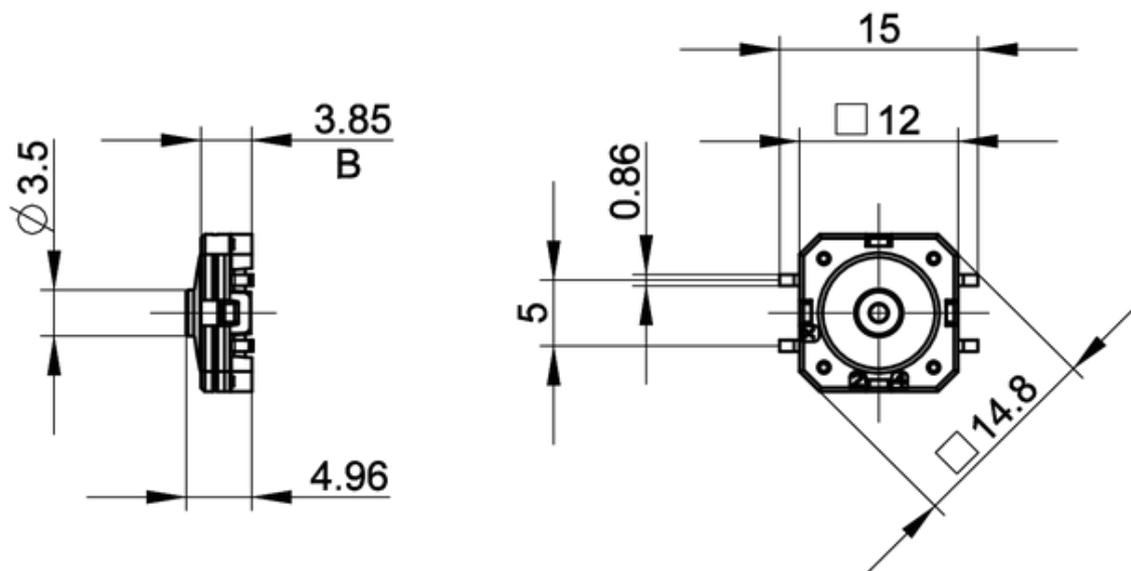
Link diretti

- eCatalog RAFI

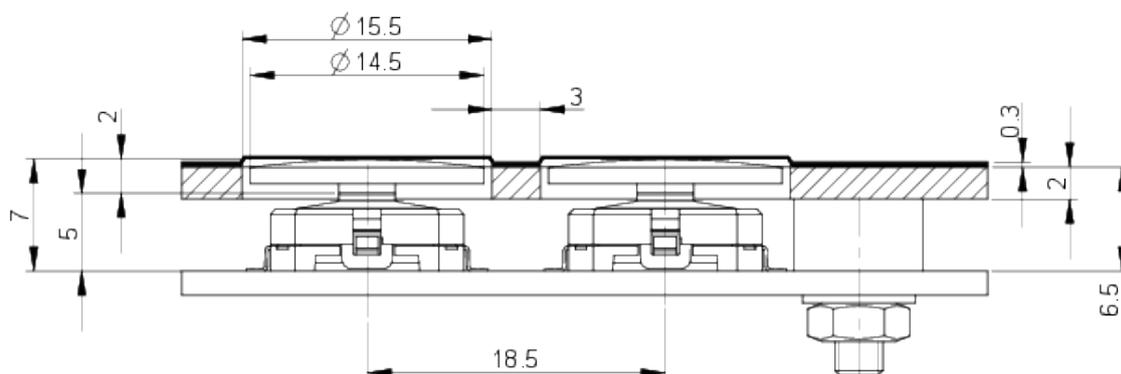
Temperatura di immagazzinaggio max.	90 °C
illuminabile	no
Metodo di brasatura	reflow
Resistenza al calore di brasatura secondo la norma	DIN EN 60068-2-58
Confezione	Blister
Unità di imballaggio	750 pezzi
Peso netto	1,5 g
Durata	1.000.000 cicli
B10	1.300.000 cicli
Grado di protezione anteriore a norma DIN EN 60529	IP54 IPx7
Grado di protezione posteriore a norma DIN EN 60529	IP54 IPx7
MSL Moisture Sensitivity Level	1
Prova di resistenza ai gas corrosivi secondo la norma	sì
MOQ ordine	750 pezzi
Conforme a RoHS	sì
Conforme a REACH	sì
Materiale dei componenti	elastomero
Codice prodotto	1C
> Dimensioni di montaggio	
Dimensione esterna lunghezza	12 mm
Dimensioni esterne larghezza	12 mm
Altezza di incasso	4,95 ± 0.1 mm
Telaio min.	12.50 x 15.24 mm
> Valori caratteristici meccanici	
Modalità di azionamento	momentaneo
Forza di azionamento max.	8 N
Forza di azionamento min.	3,6 ± 0.7 N
Corsa di azionamento	0,61 ^{±0,1} mm
Funzione contatto	1 n.a.
Sistema di contatti	Contatti change-over SPST - Single Pole Single Throw
Materiale dei contatti	oro
Brasabilità	sì
Collegamento sul retro	SMT
> Valori caratteristici elettrici	
Tensione di comando min.	0,02 Volt
Tensione di comando max.	35 Volt
Corrente di comando min.	0,00001 A
Corrente di comando max.	0,1 A
Potenza di comando max.	1 Watt

Disegni

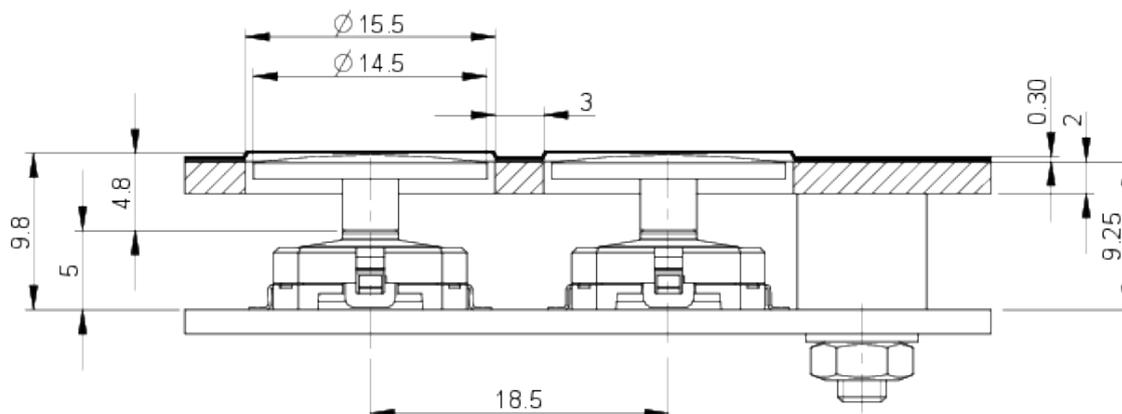
Disegni quotati



Disegno sistema



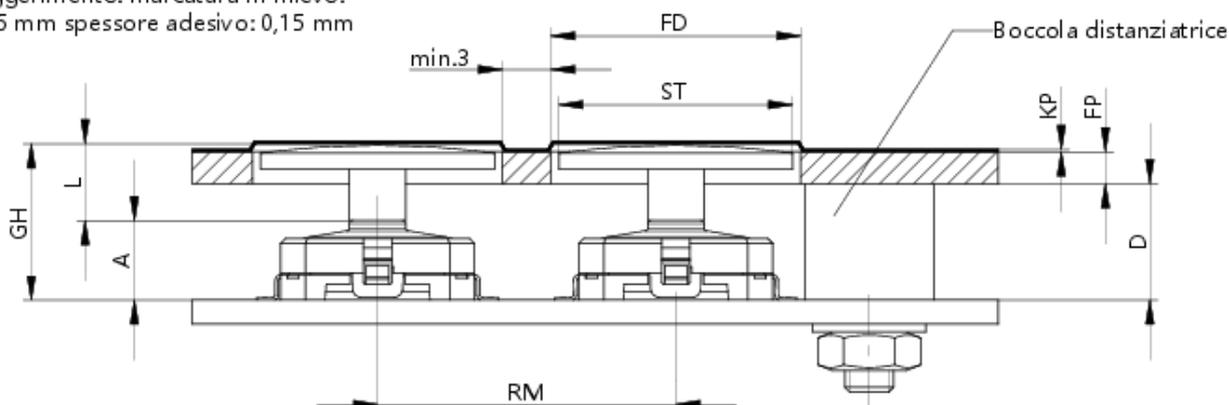
Disegno sistema



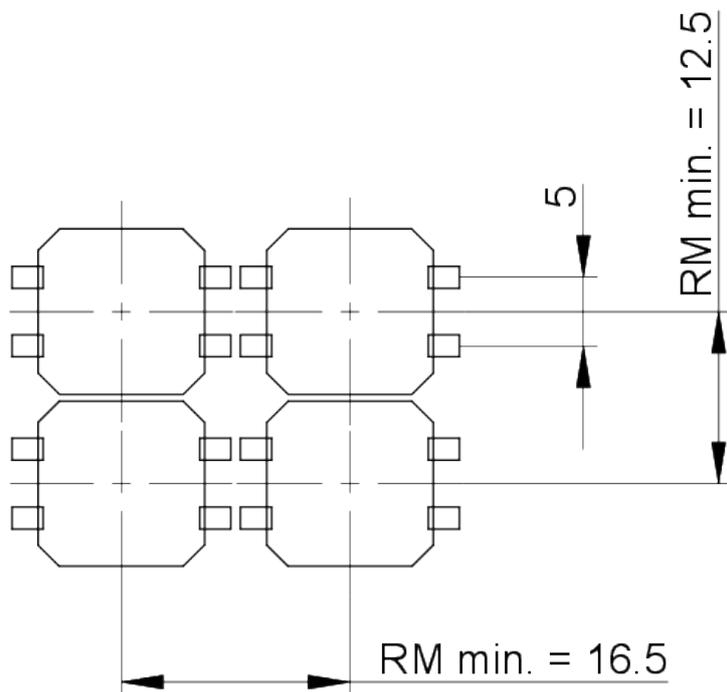
Disegno sistema

Collegamento Gullwing SMT

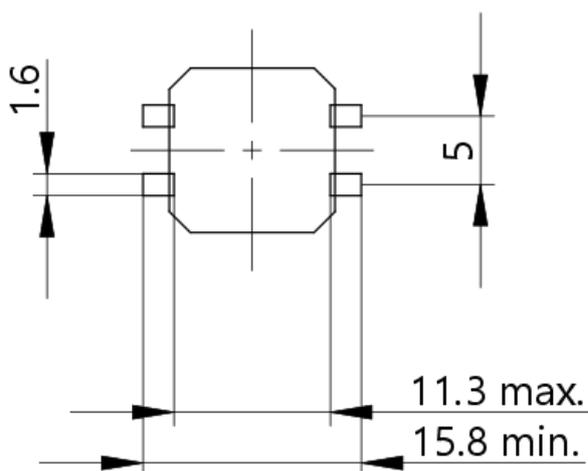
Suggerimento: marcatura in rilievo:
0,35 mm spessore adesivo: 0,15 mm



Disegno circuito stampato

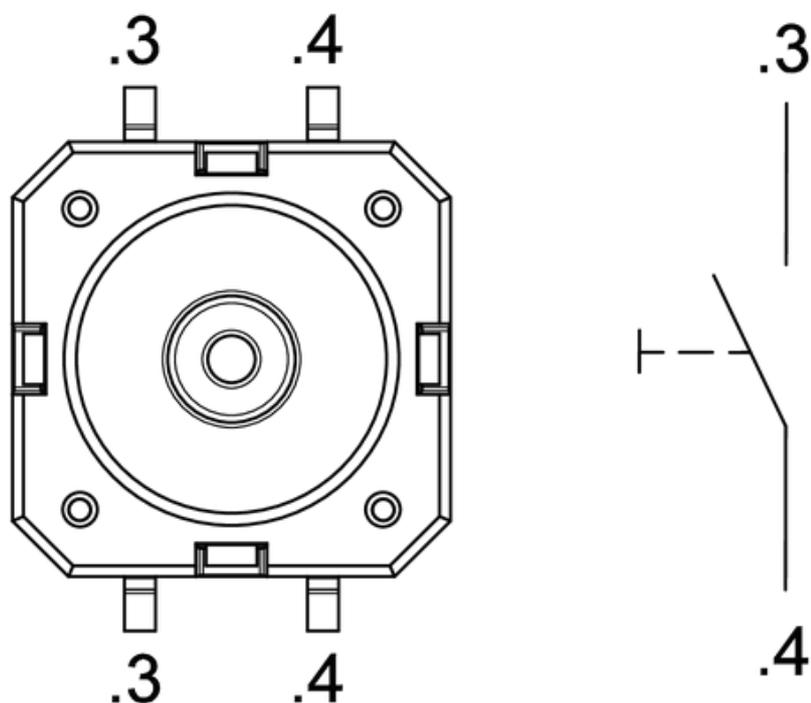


Disegno circuito stampato

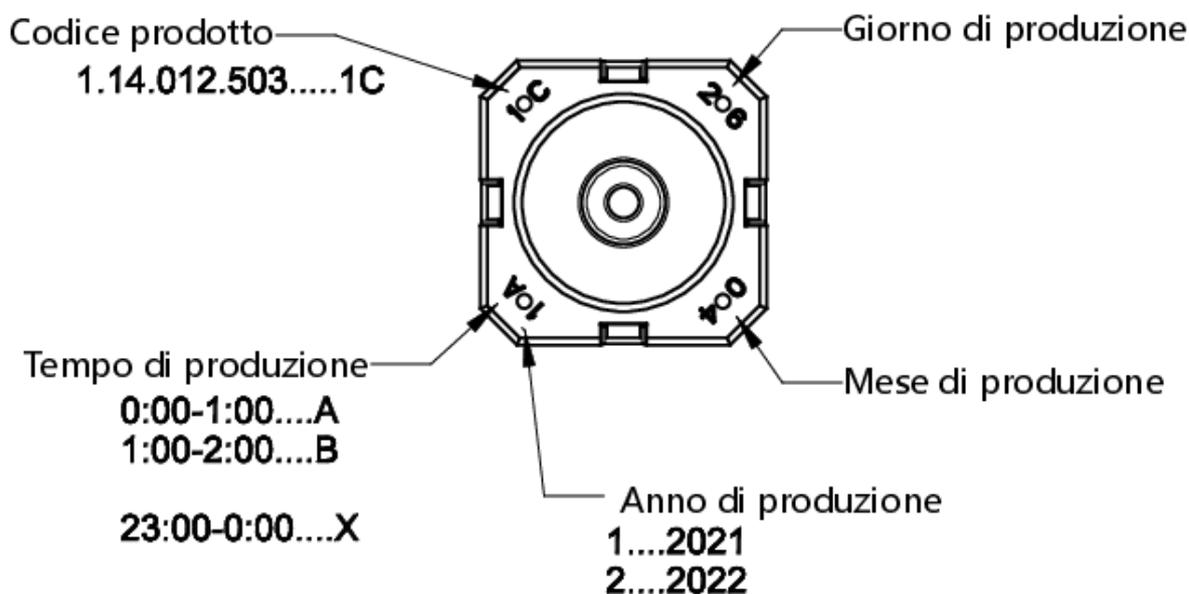


PCB-Pad
Lato componenti

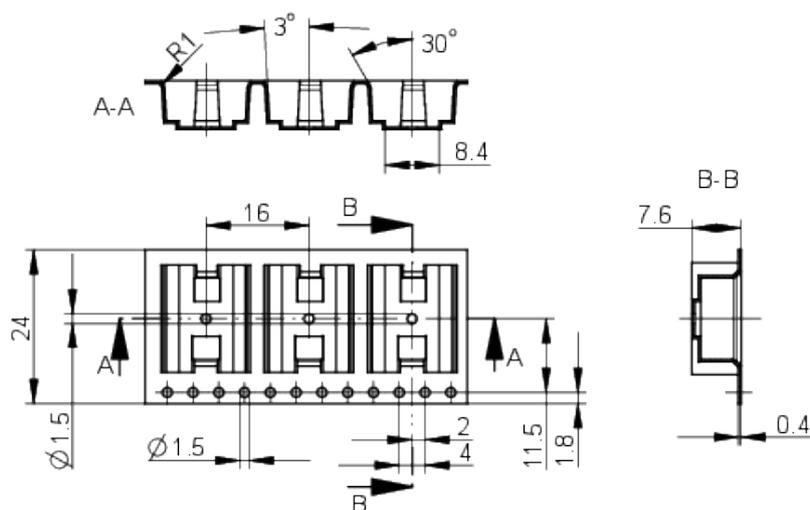
Disegno schema elettrico



Disegno codifica prodotto



Disegno confezione

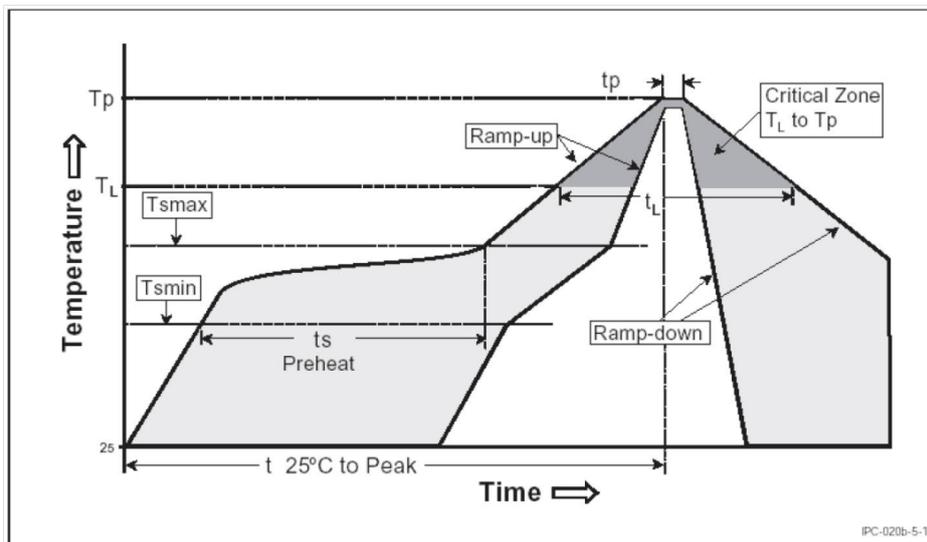


Montaggio

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})	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



Publication date: July 25, 2022

RACON 12 S

Valid for all variants RACON 12 S, 1.14.012.5XX-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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