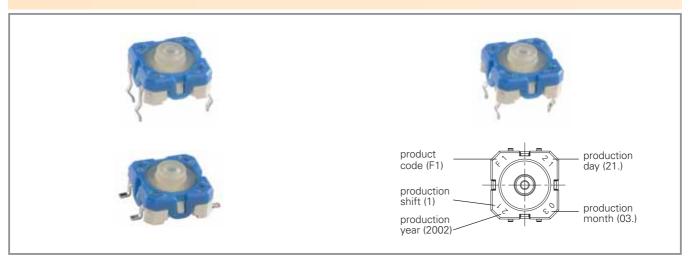


RACON 8 - Short-travel keyswitch



General Data

RACON 8 short-travel keyswitches offer an extremely high switching reliability while needing very little space. They can be arranged as single keys, in rows or key blocks.

When arranged under an overlay, RACON keyswitches should be combined with plungers.

The features at a glance:

- Suitable for the most common soldering methods
- Wave soldering bath for THT versions
- Reflow soldering for SMT version
- Vapour phase soldering for SMT versions
- Manual soldering
- SMT version suitable for processing with an automatic SMT assembly machine
- IMDS listed

You can download actual product information from our internet site www.rafi.de / Catalogues and Downloads

Technical Data

Dimensions	
Length of housing	8.4 mm
Width of housing	8.4 mm
Height of housing	see order block

Mechanical design

RACON

Mounting soldering
Terminals see order block
Contact system snap-action contact
Contact arrangement 1 NO
Contact materials Au
Illumination no

Mechanical characteristics

 $\begin{array}{ll} \text{Operating force} & 3.3^{\pm0.6} \text{ N} \\ \text{Switching travel} & 0.34^{\pm0.1} \text{ mm} \end{array}$

Electrical characteristics

Rated voltage min. 0.02 V Rated voltage max. 35 V

Rated current min. Rated current max. Rated power max. (ohmic load)	0.01 mA 100 mA 1 W
Contact resistance when new max.	100 m Ω
Insulation resistance	10 $^{9}\Omega$

Other specifications

Produkt code

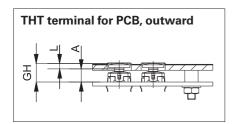
-40 °C Ambient temp. operating min. Ambient temp, operating max. +90 °C DIN EN 60068-2 -14, Resistance to environment -30,-33 and -78 Operating life 1,000,000 Solderability / Solder heat see order block resistance Flammability of materials UL 94 HB see order block **Packing**

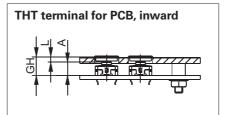
see order block

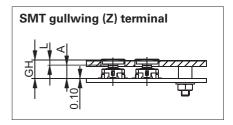
4 - 18 PCB Keyswitches



RACON 8, Typical System Assembly with Plunger under Overlay

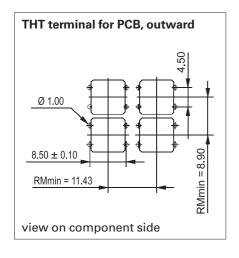


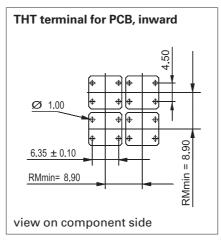


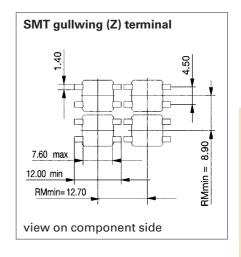


Variable	Declaration	THT terminal outward	THT terminal inward	SMT-terminal	
Α	Height of keyswitch	$A = 4.90^{+/-0.1 \text{ mm}}$			
GH	Overall height	GH =	A + L	GH = A + L + 0.1 mm	
L	Length of plunger	L = 0	6H - A	L = GH - A - 0.1 mm	

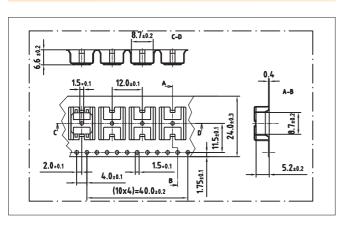
RACON 8, PCB Hole Pattern, Smallest Grid



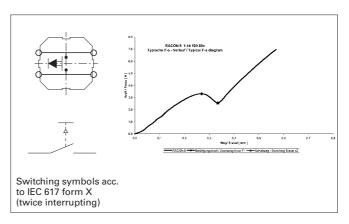




RACON 8, SMT Terminal, Tape and Reel Drawing



Circuit Diagram Typical Force-Travel Diagram



PCB Keyswitches 4 - 19

RACON

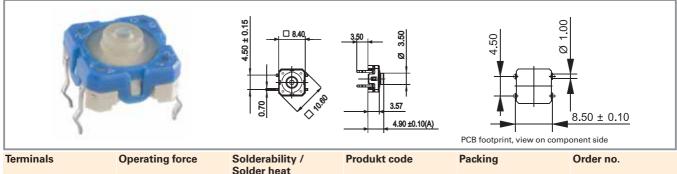


Typical accessories RACON 8 - Short-travel keyswitch

Description	Photo	Order no.	Additional accessories see page
Spacer, round, length 6.25 mm, red	170	5.30.759.034/0000	2 - 239, 4 - 82, 5 - 30
Plunger round		5.46.167.311/0209	4 - 32
RK 90 - Keycap body, for lenses 9 x 9 mm	-	5.55.103.265/1013	4 - 93

For other plungers, refer to the chapter "RACON special accessories"; for keycaps, refer to the chapter "RK 90".

RACON 8 - Short-travel keyswitch, THT outward

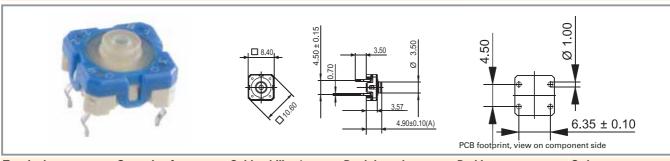


TerminalsOperating forceSolderability / Solder heat resistanceProdukt codePackingOrder no.THT outward3.3±0.6 NE DIN IEC 600 68-2-20A1tubes à 60 piece1.14.100.501/0000

Technical data see page 4 - 18

For keycaps refer to chapter "RK 90", plungers see "RACON special accessories".

RACON 8 - Short-travel keyswitch, THT inward



Terminals	Operating force	Solderability / Solder heat resistance	Produkt code	Packing	Order no.
THT inward	3.3 ^{±0.6} N	E DIN IEC 600 68-2-20	B1	tubes à 60 piece	1.14.100.502/0000

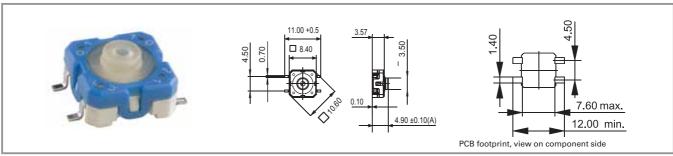
Technical data see page 4 - 18

For keycaps refer to chapter "RK 90", plungers see "RACON special accessories".

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RACON 8 - Short-travel keyswitch, SMT gullwing (Z) terminals



Terminals	Operating force	Solderability / Solder heat resistance	Produkt code	Packing	Order no.
SMT Gullwing (Z) terminals	3.3±0.6 N	E DIN IEC 600 68-2-58	C1	tape and reel à 1000 pieces	1.14.100.503/0000

Technical data see page 4 - 18

For keycaps refer to chapter "RK 90", plungers see "RACON special accessories".

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