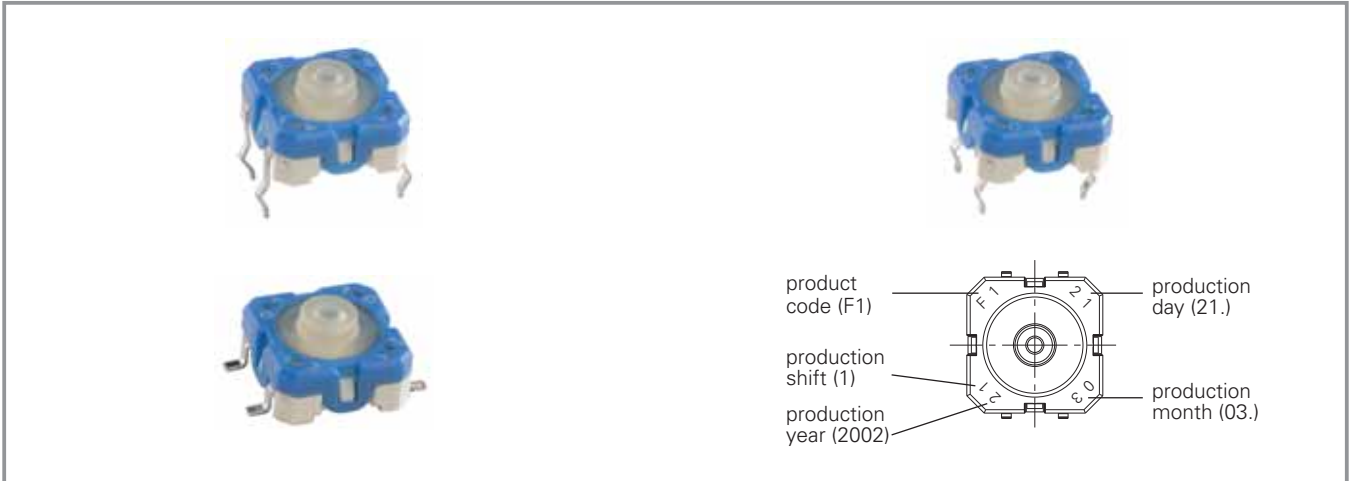


RACON 8 - Short-travel keyswitch



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

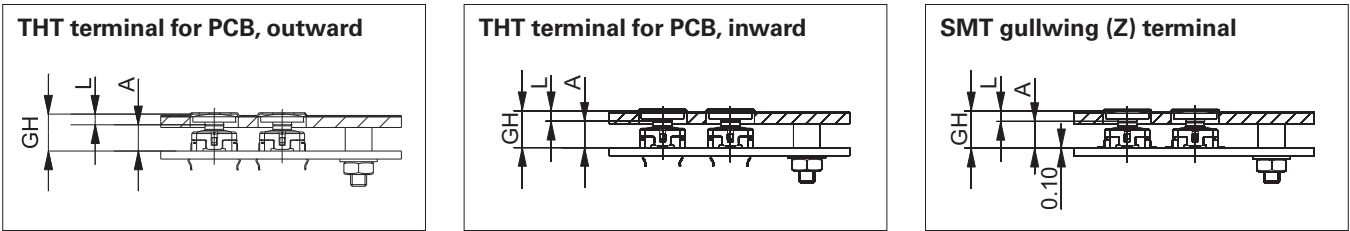
4

Technical Data

Dimensions		Rated current min.		0.01 mA
Length of housing	8.4 mm	Rated current max.		100 mA
Width of housing	8.4 mm	Rated power max.		1 W
Height of housing	see order block	(ohmic load)		
Mechanical design		Contact resistance when new max.		100 mΩ
Mounting	soldering	Insulation resistance		10 ⁹ Ω
Terminals	see order block	Other specifications		
Contact system	snap-action contact	Ambient temp. operating min.		-40 °C
Contact arrangement	1 NO	Ambient temp. operating max.		+90 °C
Contact materials	Au	Resistance to environment		DIN EN 60068-2 -14, -30,-33 and -78
Illumination	no	Operating life		1,000,000
Mechanical characteristics		Solderability / Solder heat resistance		see order block
Operating force	3.3±0.6 N	Flammability of materials		UL 94 HB
Switching travel	0.34±0.1 mm	Packing		see order block
Electrical characteristics		Produkt code		see order block
Rated voltage min.	0.02 V			
Rated voltage max.	35 V			

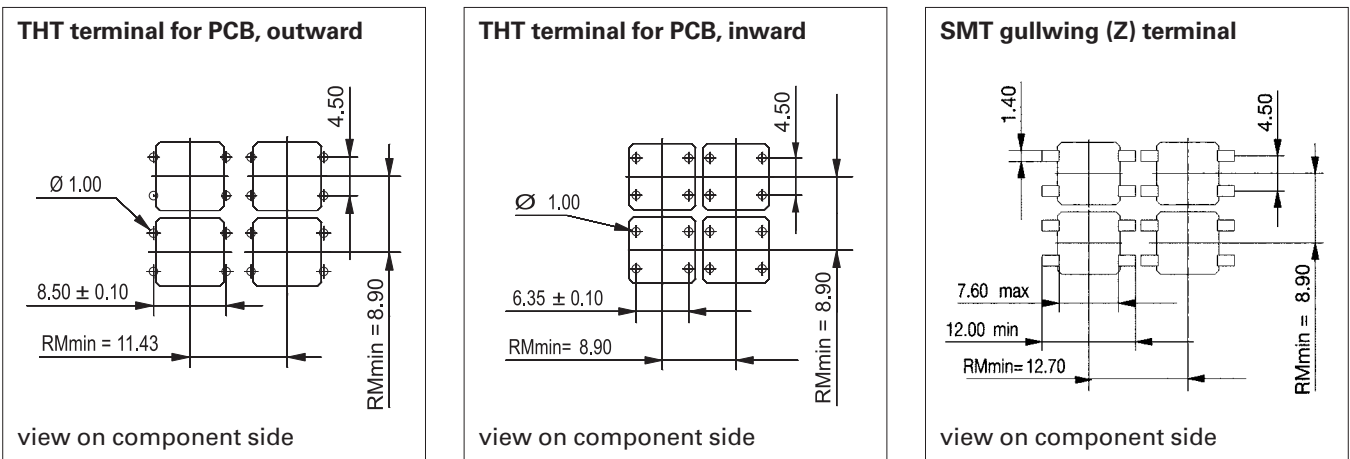
RACON

RACON 8, Typical System Assembly with Plunger under Overlay



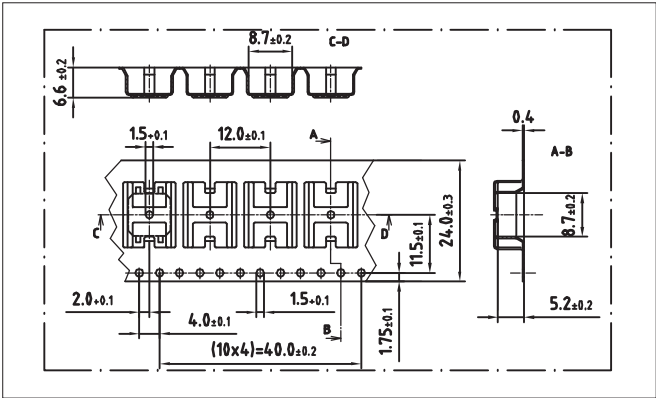
Variable	Declaration	THT terminal outward	THT terminal inward	SMT-terminal
A	Height of keyswitch	$A = 4.90 \pm 0.1 \text{ mm}$		
GH	Overall height		$GH = A + L$	$GH = A + L + 0.1 \text{ mm}$
L	Length of plunger		$L = GH - A$	$L = GH - A - 0.1 \text{ mm}$

RACON 8, PCB Hole Pattern, Smallest Grid

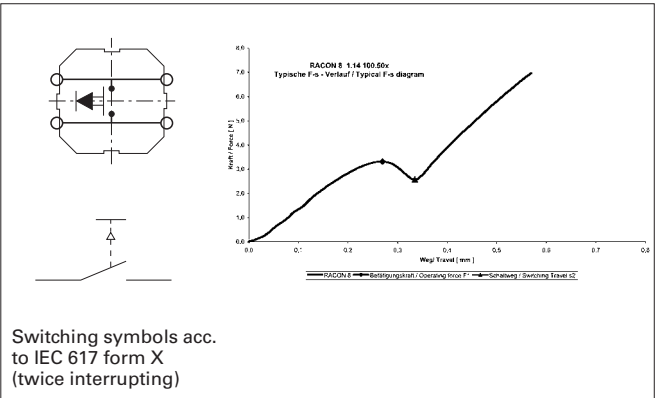


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RACON 8, SMT Terminal, Tape and Reel Drawing



Circuit Diagram RACON 8 Typical Force-Travel Diagram

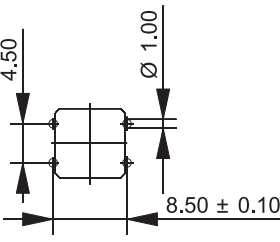
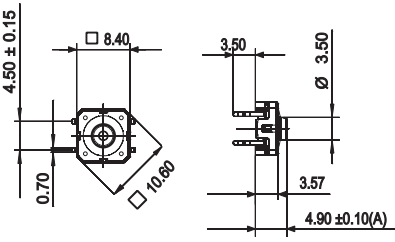


Typical accessories RACON 8 - Short-travel keyswitch

Description	Photo	Order no.	Additional accessories see page
Spacer, round, length 6.25 mm, red		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“

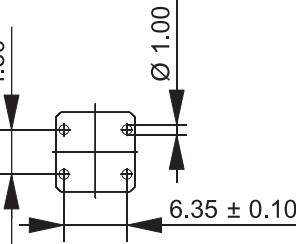
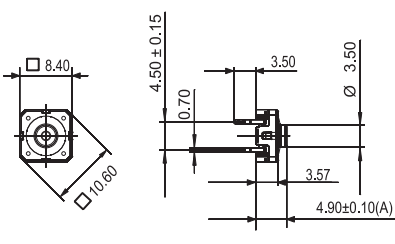
RACON 8 - Short-travel keyswitch, THT outward

 PCB footprint, view on component side					
Terminals	Operating force	Solderability / Solder heat resistance	Produkt code	Packing	Order no.
THT outward	3.3±0.6 N	E DIN IEC 600 68-2-20	A1	tubes à 60 piece	1.14.100.501/0000

Technical data see page 4 - 18

For keycaps refer to chapter „RK 90“, plungers see „RACON special accessories“

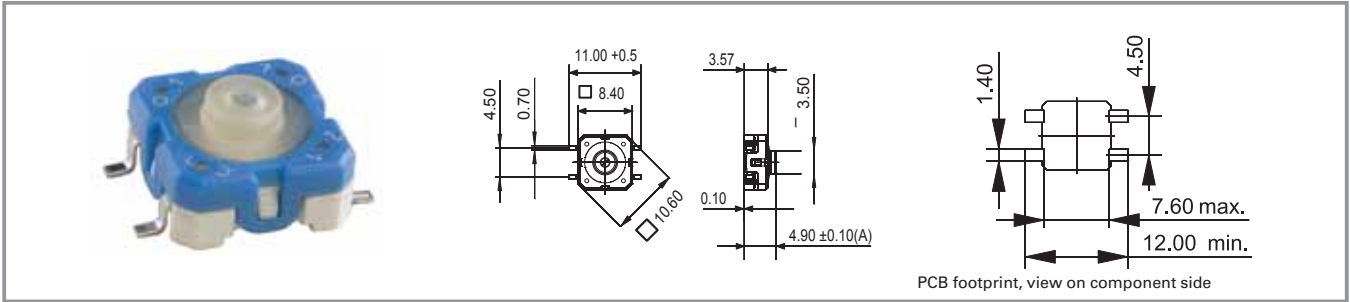
RACON 8 - Short-travel keyswitch, THT inward

 PCB footprint, view on component side					
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“

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“