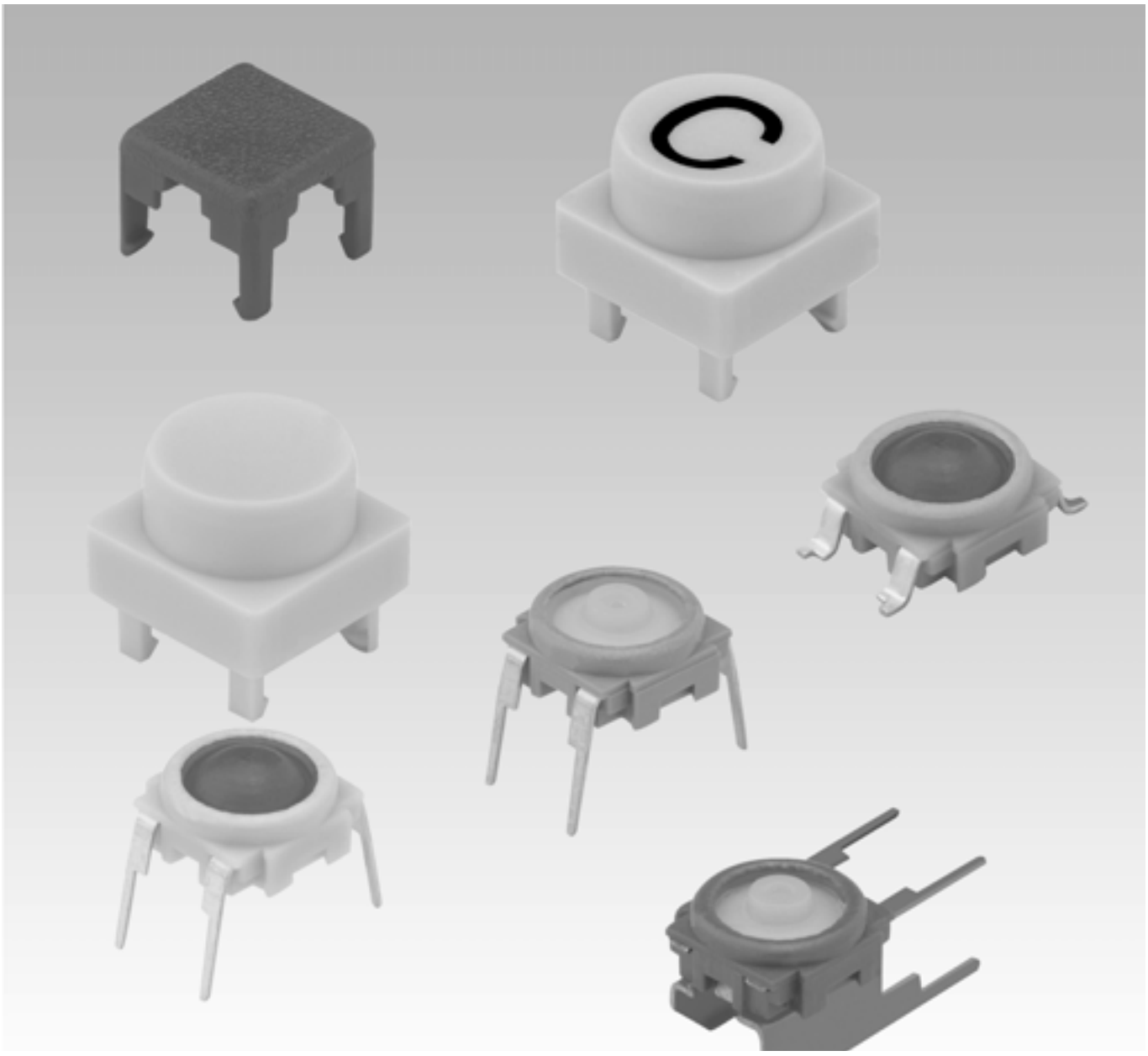


Index

Series MicroCosmos

miniature tact switch SMT

mounting under foil

	insertion/Type of mounting	contacts	material of contacts	actuating force	packaging	part no.	technical drawing	mounting dimensions	component layout
miniature tact switch SMT	automatically	1 Pole, 2 Positions	silver (standard)	4.2 N	tape & reel of 1200 pcs.	**MC.10311.91**	1	1	1
					tube of 50 pcs.	**MC.10311.92**	1	1	1
			gold plated	4.2 N	tape & reel of 1200 pcs.	**MC.12511.91**	1	1	1
					tube of 50 pcs.	**MC.12511.92**	1	1	1

technical drawings from page 719, mounting dimensions from page 720, component layouts from page 721

miniature tact switch PCB

mounting under foil or with buttons through front panel cut-out

	insertion/Type of mounting	contacts	material of contacts	actuating force	part no.	circuit drawing	technical drawing	mounting dimensions	component layout
miniature tact switch PCB	manual	1 Pole, 2 Positions	silver (standard)	3 N	**MC.10333.11**	1	4	2	5
	automatically	1 Pole, 2 Positions	silver	3 N	**MC.10191.00**	2	3	2	3
			silver (standard)	3 N	**MC.10333.00**	1	3	2	4
				4.2 N	**MC.10311.00**	1	2	2	2
			gold plated	3 N	**MC.12551.00**	1	3	2	4
				4.2 N	**MC.12511.00**	1	2	2	2

circuit drawings from page 722, technical drawings from page 719, mounting dimensions from page 720, component layouts from page 721

miniature tact switch PCB 90°

	insertion/Type of mounting	contacts	material of contacts	actuating force	part no.	circuit drawing	technical drawing	component layout
miniature tact switch PCB 90°	manual	1 Pole, 2 Positions	silver (standard)	3 N	**MC.10355.00**	3	5	6
			gold plated	3 N	**MC.12555.00**	3	5	6

circuit drawings from page 722, technical drawings from page 719, component layouts from page 721

button for foil

	colour	⧄ 8 x 8 mm Typ-Nr.	technical drawing
button for foil without marking suitable for through hole version only	light grey opaque	**80.55000.09**	6
	red	**80.55000.02**	6

technical drawings from page 719

button for front panel mounting

	colour	text	⧄ 10 x 10 mm Typ-Nr.	technical drawing
button for front panel mounting marking black suitable for through hole version only	light grey opaque	#	**80.57075.19**	8
		*	**80.57074.19**	8
		.	**80.57076.19**	8
		0	**80.57036.19**	8
		1	**80.57027.19**	8
		2	**80.57028.19**	8
		3	**80.57029.19**	8
		4	**80.57030.19**	8
		5	**80.57031.19**	8
		6	**80.57032.19**	8
		7	**80.57033.19**	8
		8	**80.57034.19**	8
		9	**80.57035.19**	8
		A	**80.57001.19**	8
		B	**80.57002.19**	8
		C	**80.57003.19**	8
		D	**80.57004.19**	8
		→	**80.57077.19**	8
without marking suitable for through hole version only	blue opaque	without text	**80.57000.05**	7
	dark grey opaque	without text	**80.57000.07**	7
	yellow opaque	without text	**80.57000.04**	7
	green opaque	without text	**80.57000.03**	7
	light grey opaque	without text	**80.57000.09**	7
	red opaque	without text	**80.57000.02**	7

further markings on request
technical drawings from page 719

MicroCosmos

electrical characteristics

insulation resistance
at 100 V: > 1000 MΩ

life time
at nominal rating: 10^6 operations

contact power rating
0.5 W

rebound time
< 5 ms

voltage
nominal: 24 V,
minimum:
- standard contacts Ag: 100 mV,
- tropicalized contacts Au: 10 mV
maximum: 50 V

electric strength
at 50 Hz V eff.: 250 V

current
nominal: 20 mA,
minimum:
- standard contacts Ag: 10 mA,
- tropicalized contacts au: 500 µA

contact resistance
standard contacts Ag: < 100 mΩ,
tropicalized contacts Au: < 20 mΩ

mechanical characteristics

terminal plating
mean value: 4 µ Sn Pb on Ni

contact plating
mean value: standard contacts Ag: 2 µ Ag on Ni,
tropicalized contacts Au: 0.5 µ Au on Ni

actuating force
standard mean value:
SMD: 4.2 N, through hole operations: 3 or 4.2 N

actuating travel
mean value:
SMD: 0.5 mm, through hole operations: 0.45 mm,
maximum incl. overtravel
(mean value): 0.80 mm

insulation thermoplastic
glass filled polyamide self-extinguishing 94 V-0
(UL-94)

resistance to shock
(IEC 512-4) 100 g: 6 ms

resistance to vibrations
(IEC 512-4): 10 - 2000 Hz
0,75 mm Amplitude 10g,
Time: 2.5 Hours

climatic characteristics

service temperature
SMD:
- contact Ag: -55°C to + 85°C,
- contact Au: -55°C to + 125°C,
through hole mounting: -25°C to + 85°C

sealing
(IEC 68-2-45) soldering and cleaning in solvents by immersion,
HCFC 141 B type.

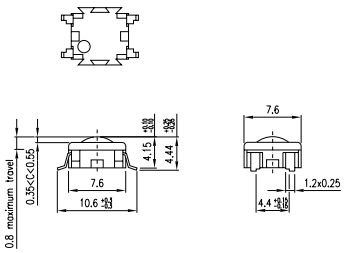
damp heat
(IEC 512-6) 21 days

storage temperature
SMT:
- contacts Ag: -55°C to + 85°C,
- contacts Au: -55°C to + 125°C
through hole mounting: -55°C to + 85°C

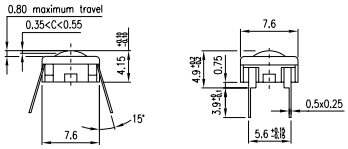
soldering
SMT: 200°C < 60 sec.,260°C < 15 sec.
through hole: 250°C/5 sec.

technical drawings

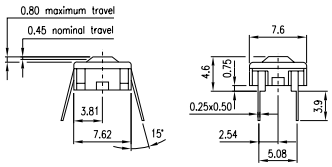
1 miniature tact switch SMT
page 715



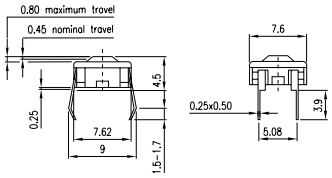
2 miniature tact switch PCB
page 715



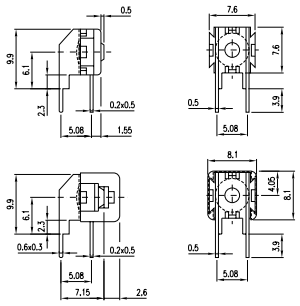
3 miniature tact switch PCB
page 715



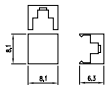
4 miniature tact switch PCB
page 715



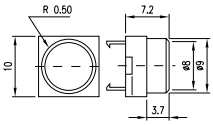
5 miniature tact switch PCB 90°
page 716



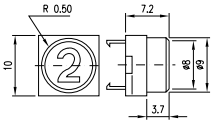
6 button for foil
page 717



7 button for front panel mounting
page 717

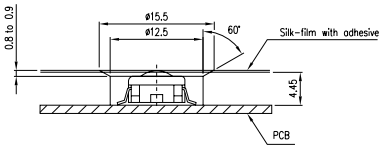


8 button for front panel mounting
page 717

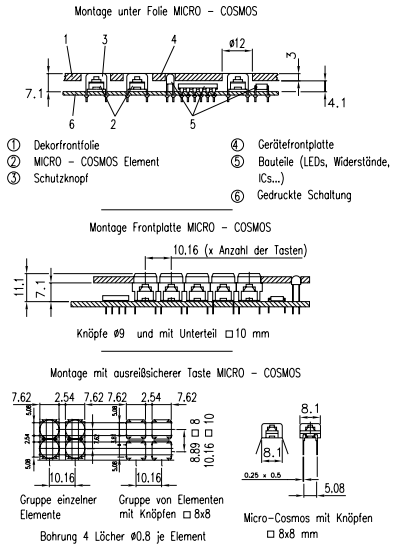


mounting dimensions

1 miniature tact switch SMT
page 715

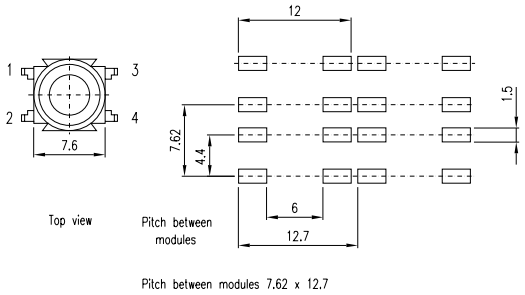


2 miniature tact switch PCB
page 715

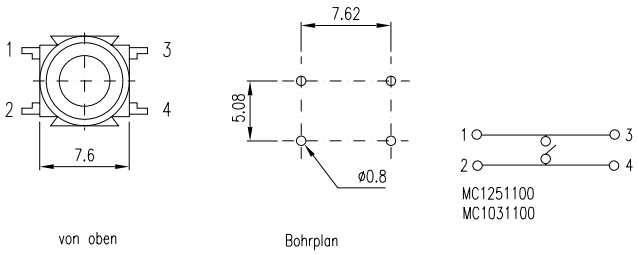


component layouts

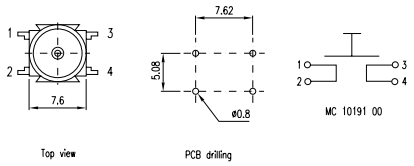
1 miniature tact switch SMT
page 715



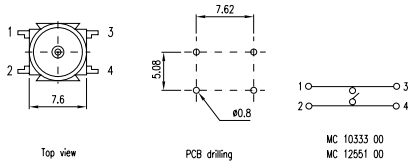
2 miniature tact switch PCB
page 715



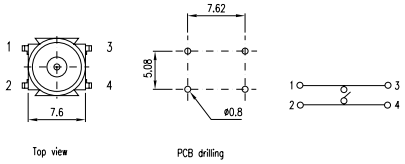
3 miniature tact switch PCB
page 715



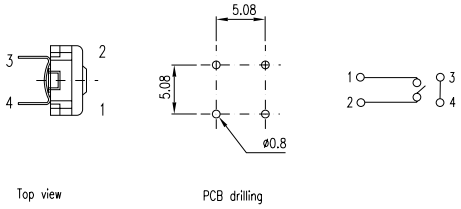
4 miniature tact switch PCB
page 715



5 miniature tact switch PCB
page 715

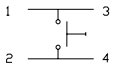


6 miniature tact switch PCB 90°
page 716

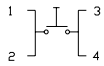


circuit drawings

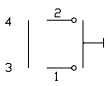
1 miniature tact switch PCB
page 715



2 miniature tact switch PCB
page 715



3 miniature tact switch PCB 90°
page 716



Note:
More information about the PCB-Software can be found at www.pcad.com/en/library.