

miniature tact switch SMT

mounting under foil



recommended accessories:

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	insertion/Type of mounting	contacts	material of contacts	actu-ating force	packaging	part no.	technical drawing	mounting dimension	components layout
miniature tact switch SMT momentary action	automatically	1 NO sin- gle-break	gold plated (tropical- ized)	4, 2 N	tape & reel of 1200 pcs.	MC.12511.91	1	1	1
					tube of 50 pcs.	MC.12511.92	1	1	1
			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

contacts: NO = normally open
technical drawing as of page MicroCosmos.5. mounting dimensions, components layouts as of page MicroCosmos.6

miniature tact switch PCB

mounting under foil or on front panel cut-out



recommended accessories:

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	insertion/Type of mounting	contacts	material of contacts	actuating force	part no.	circuit drawing	technical drawing	mounting dimension	components layout
miniature tact switch PCB momentary action	automatically	1 NO single-break	gold plated (tropical- ized)	4, 2 N	MC.12511.00	1	3	2	5
				3 N	MC.12551.00	1	2	2	4
			silver (standard)	3 N	MC.10333.00	1	2	2	4
				4, 2 N	MC.10311.00	1	3	2	5
	hand mounting	1 NO single-break	silver	3 N	MC.10191.00	2	2	2	3
			gold plated (tropical- ized)	3 N	MC.12551.11	1	4	2	2
			silver (standard)	3 N	MC.10333.11	1	4	2	2

contacts: NO = normally open
technical drawing as of page MicroCosmos.5. mounting dimensions, components layouts as of page MicroCosmos.6
circuit drawing as of page MicroCosmos.10

miniature tact switch PCB 90°



recommended accessories:
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	insertion/Type of mounting	contacts	material of contacts	actuating force	part no.	circuit drawing	technical drawing	components layout
miniature tact switch PCB 90° momentary action	hand mounting	1 NO single-break	gold plated (tropicalized)	3 N	MC.12555.00	3	5	6
			silver (standard)	3 N	MC.10355.00	3	5	6

contacts: NO = normally open
[technical drawing as of page MicroCosmos.5](#), [mounting dimensions, components layouts as of page MicroCosmos.6](#)
[circuit drawing as of page MicroCosmos.10](#)

knob for foil				
			technical drawing	
	colour	part no.		
knob for foil without marking	light grey opaque	80.55000.09	6	

technical drawing as of page MicroCosmos.5

knob for front panel mounting				
			technical drawing	
	colour	text	part no.	
knob for front panel mounting marking black	light grey opaque	÷	80.57055.19	8
		→	80.57077.19	8
		*	80.57074.19	8
		#	80.57075.19	8
		+	80.57071.19	8
		-	80.57072.19	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
		=	80.57069.19	8
		A	80.57001.19	8
		B	80.57002.19	8
without marking	blue opaque	without text	80.57000.05	7
		without text	80.57000.07	7
		without text	80.57000.03	7
		without text	80.57000.09	7
		without text	80.57000.02	7
		without text	80.57000.04	7



technical drawing as of page MicroCosmos.5

MicroCosmos

electrical characteristics

contact power rating

nominal: 0,5 W

contact resistance

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

current

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

electric strength

at 50 Hz V eff.: 250 V

insulation resistance

at 100 V: > 1000 MΩ

life time

at nominal rating: 10⁶ operations

rebound time

< 5 ms

voltage

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

mechanical characteristics

actuating force

standard mean value:
SMD: 4,2 N, through hole operations: 3 oder 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

contact plating

mean value: standard contacts Ag: 2 µ Ag on Ni, tropicalized con-
tacts Au: 0,5 µ Au on Ni

insulation

glass filled polyimide 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

terminal plating

mean value: 4 µ Sn Pb

climatic characteristics

damp heat

(IEC 512-6) 21 days

sealing

(IEC 68-2-45) soldering and cleaning in solvents by immersion,
CFC and HCFC compatible.

service temperature

SMD:
- contact Ag: -55°C + 85°C,
- contact Au: -55°C + 85°C,
through hole operations: -25°C + 85°C

soldering

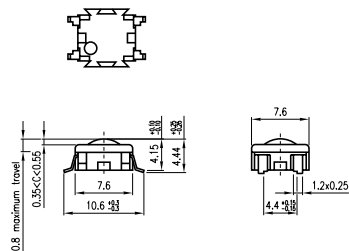
SMT: 200°C < 60 sec., 260°C < 15 sec.
through hole: 250°C/5 sec.

storage temperature

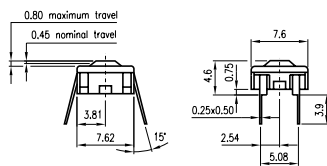
SMT:
- contacts Ag: -55°C +85°C,
- contacts Au: -55°C +85°C
trough hole operations: -55°C +85°C

Technical Drawing

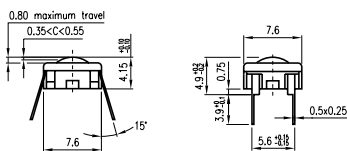
1 miniature tact switch SMT
page MicroCosmos.1



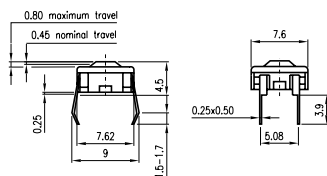
2 miniature tact switch PCB
page MicroCosmos.1



3 miniature tact switch PCB
page MicroCosmos.1

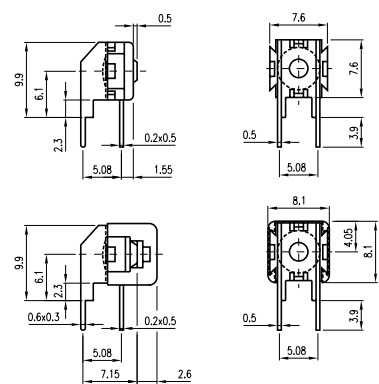


4 miniature tact switch PCB
page MicroCosmos.1



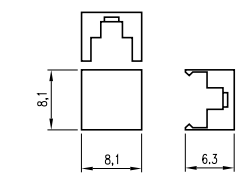
5 miniature tact switch PCB 90°

page MicroCosmos.2



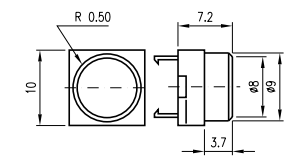
6 knob for foil

page MicroCosmos.3



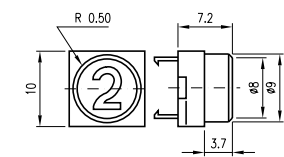
7 knob for front panel mounting

page MicroCosmos.3



8 knob for front panel mounting

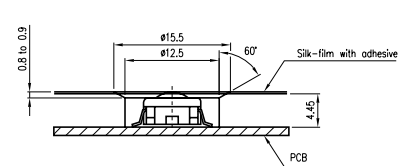
page MicroCosmos.3



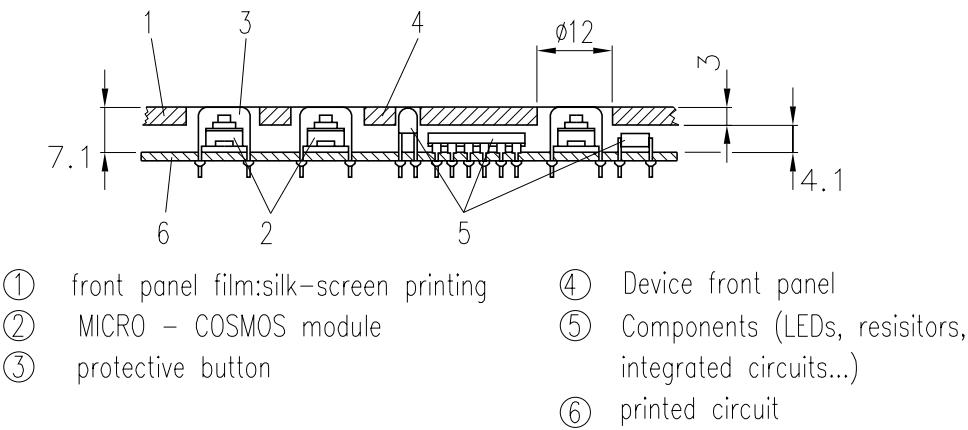
Mounting Dimension

1 miniature tact switch SMT

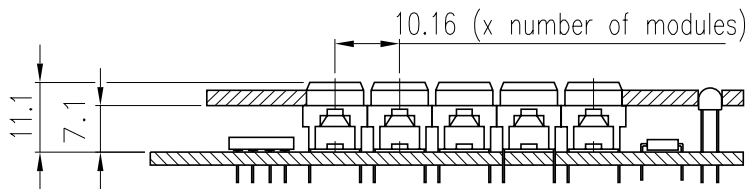
page MicroCosmos.1



MICRO – COSMOS under film layout

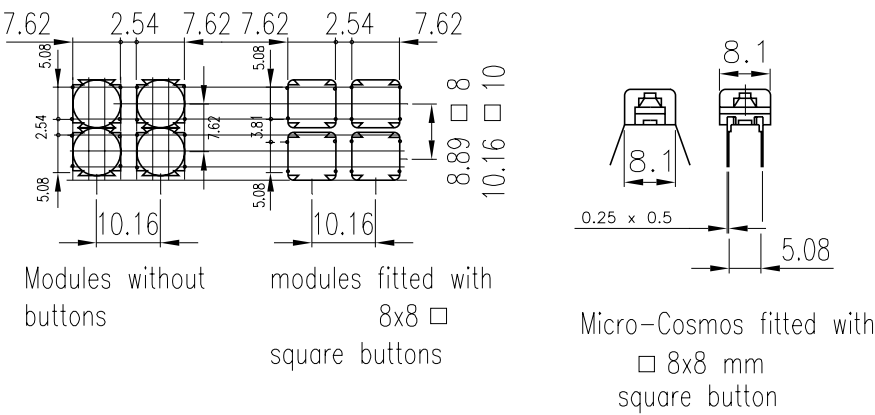


MICRO – COSMOS building block mounting



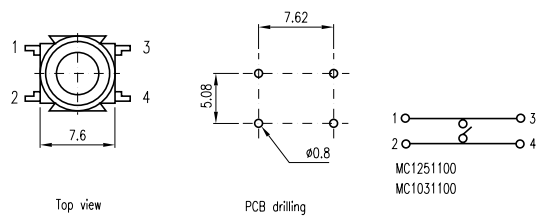
With buttons $\varnothing 9$ and square cases $\square 10$ mm

MICRO – COSMOS building block module assembly



Four 0.8 fixing holes per module

5 miniature tact switch PCB
page MicroCosmos.1



6 miniature tact switch PCB 90°
page MicroCosmos.2

