

BT

Miniature Toggle Switch

RoHS Compliant



■ Features

1. Terminal pin pitch: 2.54 mm.
2. Gold-plated contacts
3. Wiping contact mechanism for long-term reliability
4. Independent detent mechanism ensures light operational feel.
5. Epoxy-sealed terminal pins
6. Miniature size (Single-pole: 7.6mm, Double-pole: 12.7mm) for high density mounting.

■ Specifications

Rating	Max.	50mA 20VAC · DC
Initial contact resistance	50mΩ max.	(1.5mA 200μVAC)
Dielectric strength	500VAC 1 minute	
Insulation resistance	10,000MΩ min.	(250VDC)
Electrical life	50,000 cycles	
Operating temperature range	−20°C~+85°C	
Storage temperature range	−40°C~+85°C	

■ Part Numbering

B

T

2

N

—

2

M

4

Series code

Actuator shape

Number of poles

Switching function

Terminal style

Actuator shape

Bracket style

Code	Type
T	Toggle type

Fig.	Number of poles
1	1 pole
2	2 poles

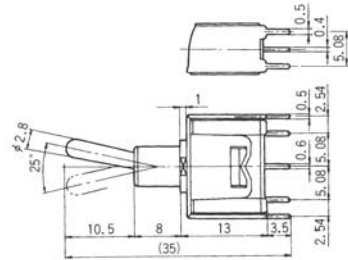
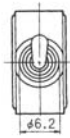
Code	Switching function
D N	ON — ON
E P	ON—OFF—ON
F R	ON — (ON)
G S	(ON)—OFF—(ON)
H T	ON—OFF—(ON)

Fig.	Terminal style
2	PC Straight

Code	Actuator shape
M	Standard

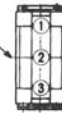
Fig.	Bracket
4	With bracket

(ON) : Momentary.

BT**SPDT****PC Straight**

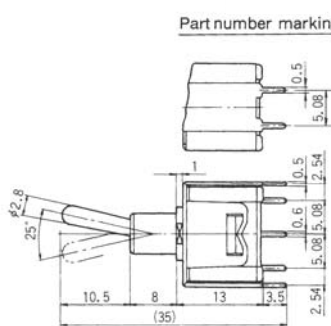
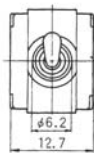
Terminal numbers are not shown on the switch.

Part number marking side



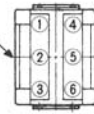
Rating marking side

Switching function Part No.	Viewed from part No. marking side		
☆BT1D-2M4-Z	ON	—	ON
★BT1E-2M4-Z	ON	OFF	ON
★BT1F-2M4-Z	(ON)	—	ON
★BT1G-2M4-Z	(ON)	OFF	(ON)
★BT1H-2M4-Z	(ON)	OFF	ON
Connecting terminals	2—1	—	2—3

DPDT**PC Straight**

Terminal numbers are not shown on the switch.

Part number marking side



Rating marking side

Switching function Part No.	Viewed from part No. marking side		
★BT2N-2M4-Z	ON	—	ON
★BT2P-2M4-Z	ON	OFF	ON
▲BT2R-2M4-Z	(ON)	—	ON
▲BT2S-2M4-Z	(ON)	OFF	(ON)
▲BT2T-2M4-Z	(ON)	OFF	ON
Connecting terminals	2—1 5—4	—	2—3 5—6

PC Hole Layouts

1—pole	
2—poles	

Optional Accessories

《Sold separately》

Color Cap (Round type)		
Dimensions	Color	Part. No.
	White Red Black Gray	140000470030 140000470098 140000470031 140000470037
Vinyl chloride resin		

Color Cap (Square type)		
Dimensions	Color	Part. No.
	White Red Black Gray	140000470038 140000470100 140000470039 140000470077
Vinyl chloride resin		

BT

■ Soldering Specifications

- (1) Manual Soldering
 - Device : Soldering iron
 - 380°C, Max.; 3 seconds, Max.
- (2) Auto Soldering
 - Device : Jet wave type or dip type
 - 275°C, Max.; 3 seconds, Max.
- Pre-heating should be done at temperatures below 100°C and within 30 sec.
- (3) When soldering two or more terminals to the common land, use the solder resist to solder them independently.

■ Flux Cleaning

- (1) Solvent : Fluorine or Alcohol type.
- (2) The **BT** series are not washable. To wash the PC board, clean the soldering surface of PC board with a brush so that the switch is not exposed to the cleaning solution.
- (3) Cleaning after soldering should be done after the terminal temperature falls to 90°C or below, or after leaving the switch for five minutes or longer at room temperature.

■ Mounting of Switch

- Use PC boards with hole diameter of 0.8mm.
- Do not bend the terminal pins before mounting the switch on the PC board.
- After mounting the switch, do not place the device in such a way that the device weight will be applied on to the actuator of the switch.
- Do not apply load exceeding 29.4N to the actuator.