8 Series Pushbutton Switches

■Features

1. Contacts
Silver or gold-plated contacts.

2. Epoxy resin case
UL94V-0 self-extinguishing epoxy.

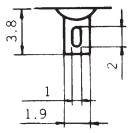
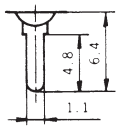
3. Actuator style
Over 30 actuator variations.

4. Insulation between terminal and ground:
4 mm minimum.

5. Prevention of flux entry
The epoxy resin seal on bottom of the switch helps prevent the entry of solder and flux.

6. Insulation barrier:
Insulation barrier design between poles helps prevent short-circuiting between poles ensuring high reliability.

■ Terminal Styles

Solder（Style：1）	PC Straight（Style：2）
t=0.8 	t=0.8 

■ Specifications

Rating	Max. rating	6A 125 VAC/3A 250 VAC/4A 30 VDC(Resistive load)	
Initial contact resistance		10 mΩ max.	（1A 2～4 VDC）
Initial dielectric strength		1,500 VAC 1 minute	
Initial insulation resistance		1,000 MΩ min.	（500 VDC）
Electrical life（Excluding 8R & 8W）		Alternate type	40,000 operations
		Momentary type	25,000 operations
Operating temperature range		−30°C～＋85°C	
Storage temperature range		−40°C～＋85°C	

（Excluding 8R & 8W.）

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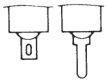
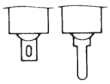
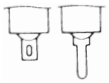
8 Series Pushbutton Switches Selection Table

Part No.	Name	Actuator shape	Number of poles	Switching function	Terminal style	Page
8N	Standard Pushbutton		1.2.3.4	ON – ON ON – (ON)	 S/D Solder P/C Straight	239
8P	Splash Proof Pushbutton		1.2	ON – ON ON – (ON)	 S/D Solder	242
8Y	Mustang Pushbutton		1.2.3	ON – ON ON – (ON)	 S/D Solder	245
8R-N	Soft Touch Pushbutton		1.2	ON – ON ON – (ON)	 S/D Solder P/C Straight	248
8W-N	Snap-in Pushbutton		1.2	ON – (ON)	 S/D Solder P/C Straight	251

■Part Numbering

8 N 1 01 1 B – Z

- 8 ● Series code
- N ● Actuator shape
- 1 ● Number of poles
- 01 ● Switching function
- 1 ● Terminal style
- B ● Contact plating and material (※1)

Code	Actuator
N	Standard
P	Splash proof
Y	Mustang
R	Soft Touch
W	Snap-in

Fig.	Number of poles
1	1 pole
2	2 poles
3	3 poles
4	4 poles

Fig.	Switching function
01	ON – ON
02	ON – (ON)

Fig.	Terminal style
1	Solder
2	PC Straight

Code	Contact material	Plating
None	Bs+Ag or Cu+Ag	Ag
B	Bs or Cu	Ni+Au
C	Bs+Ag or Cu+Ag	Ni+Au

※1 Bs= Brass
Cu= Copper
Ag= Silver
Ni= Nickel
Au= Gold

Note : Some combinations may not be available. Please check the "Table of Part Numbers" for each series.

(ON):Momentary.

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8N

Standard Pushbutton Switches

RoHS Compliant

■Features

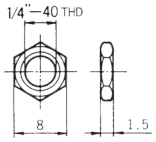
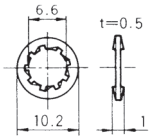
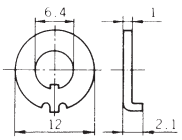
The 8N standard pushbutton switch is the basic type of “8” Series. Momentary and alternate functions are available. Color button is available in 8mm, 10mm and 15mm diameter and in 4 colors.

■Table of Part Numbers

Terminal style	Switching function \ No. of pole	1 pole	2 poles	3 poles	4 poles
Solder Lug	ON – ON	**8N1011–Z**	☆ **8N2011–Z**	★ **8N3011–Z**	▲ **8N4011–Z**
	ON – (ON)	**8N1021–Z** ▲ **8N1021C–Z**	**8N2021–Z**	★ **8N3021–Z**	★ **8N4021–Z**
PC Straight	ON – ON	——	★ **8N2012–Z**	——	——
	ON – (ON)	☆ **8N1022–Z**	☆ **8N2022–Z**	——	——

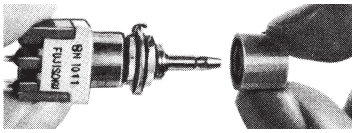
■ Standard Accessories

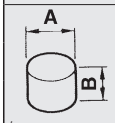
《Supplied with switch》

Hex Nut	Lockwasher	Locking Ring
140008010241	**140008030051**	**140008020062**
		
Nickel plated	Zinc plated	Zinc plated

■Color Button Mounting

Snap in the color button on to the actuator.



Part name		Color Button		
Dimension **A**		ϕ8	ϕ10	ϕ15
Dimension **B**		7.5	8	10
	White	**140000481420**	**140000480082**	**140000480088**
	Red	**140000481421**	**140000480083**	**140000480089**
	Black	**140000481422**	**140000480081**	**140000480090**
(Material : PA)	Gray	**140000481423**	**140000480084**	**140000480091**

★ : Made to order products. ☆ : Semi-standard products. ▲ : Inquiry products. (ON) : Momentary.

●Hex Nut (2 pcs), Lockwasher (1 pc), and Locking Ring (1 pc) are supplied with the switch. A Color Button is also supplied with the switch. Please specify the part number from the above table when ordering.

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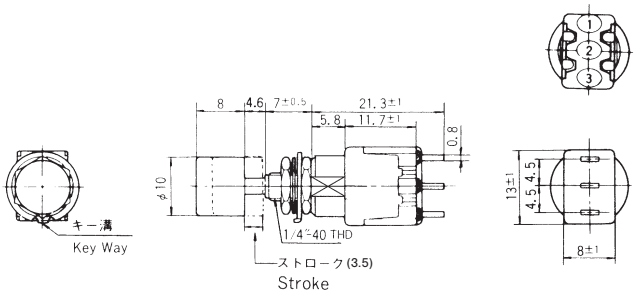
SPDT



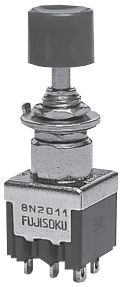
Terminal numbers are not shown on the switch.

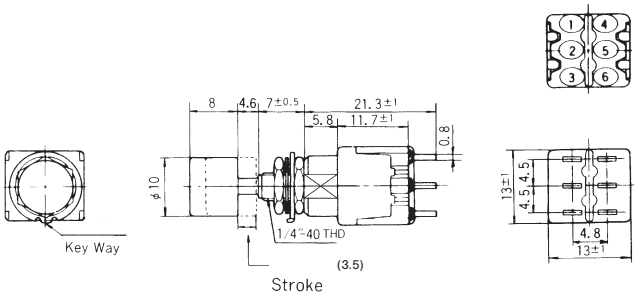
Switching function / Part No.		
※ 8N101■-Z	ON	ON
8N102■-Z	ON	(ON)
Connecting terminals	2-3	2-1

※ : The circuit switches each time the switch button is pressed.

■ : Please refer to "Table of Part Numbers" for a list of full part numbers.

DPDT





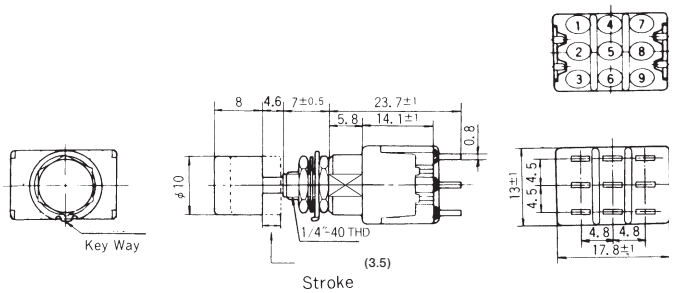
Terminal numbers are not shown on the switch.

Switching function / Part No.		
※ 8N201■-Z	ON	ON
8N202■-Z	ON	(ON)
Connecting terminals	2-3 5-6	2-1 5-4

※ : The circuit switches each time the switch button is pressed.

■ : Please refer to "Table of Part Numbers" for a list of full part numbers.

3PDT



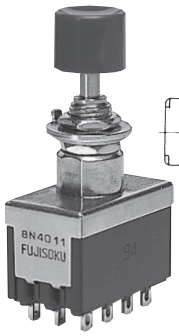
Terminal numbers are not shown on the switch.

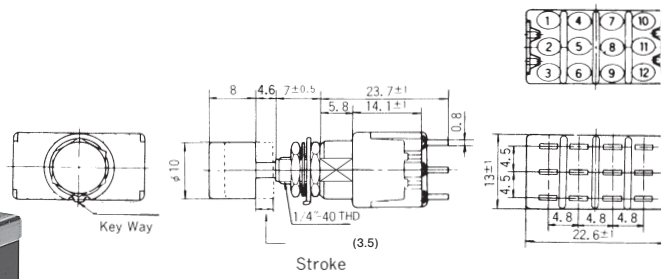
Switching function / Part No.		
※ 8N301■-Z	ON	ON
8N302■-Z	ON	(ON)
Connecting terminals	2-3 5-6 8-9	2-1 5-4 8-7

※ : The circuit switches each time the switch button is pressed.

■ : Please refer to "Table of Part Numbers" for a list of full part numbers.

4PDT





Terminal numbers are not shown on the switch.

Switching function / Part No.		
※ 8N401■-Z	ON	ON
8N402■-Z	ON	(ON)
Connecting terminals	2-3 5-6 8-9 11-12	2-1 5-4 8-7 11-10

※ : The circuit switches each time the switch button is pressed.

■ : Please refer to "Table of Part Numbers" for a list of full part numbers.

(ON) : Momentary.

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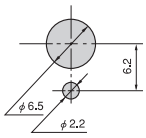
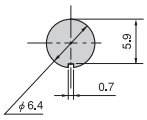
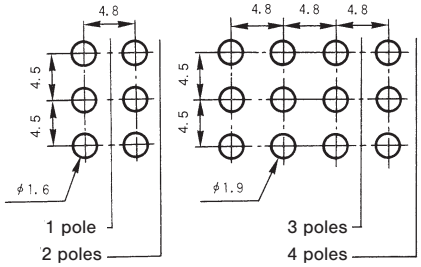
■Panel Cut-Out Dimensions

Series	8N	
Panel thickness	1.5 mm Max.	2.5 mm Max.
Dimensions	 With Locking Ring	 Without Locking Ring

■PC Hole Layouts

Series	8N
Dimensions	

■Precautions

1. Soldering Specifications

(1)Manual soldering

Device : Solder iron

①420℃ Max. 3 sec. Max.

(2)Auto soldering

②275℃ ±10℃ 5 sec. Max.

The above-stated soldering conditions shall apply only to switches with straight terminals. Auto soldering is not possible with right-angle terminals. Switches with right-angle terminals should be soldered manually according to the conditions specified in (1) above.

(3)When putting the switches through an aging process after they were soldered onto the printing board or after installed into a complete end product, be sure to remove the buttons ofthe switches.

2. Mounting

- Do not bend the terminals 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.
- For switches with straight terminals, solder the switch on the PC board after fixing the switch on the panel with a nut.

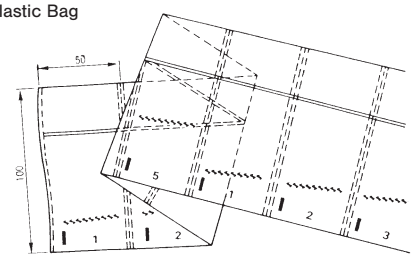
3. Flux Cleaning

(1)Solvent : Fluorine or Alcohol type.

(2)8 series are not washable. To wash the PC board, clean the soldering surface of the PC board with a brush so that the switch is not exposed to the cleaning solution.

■Packaging Specification

Perforated Plastic Bag 25 pcs./pack



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