

## **HYPER-MINIATURE PUSHBUTTON SWITCHES**

### **■ FEATURES**

- It is of ultra-compact type. The volumetric ratio is half that of the conventional Series A.
- Immersion cleaning is possible after soldering.
- Terminal mounting is at 0.1-inch pitches.
- Independent detent mechanism provides light feel operability.
- Regarding the contact reliability, a long-term stability is assured by the clip contact.
- Gold plated contacts.

### ■ SPECIFICATIONS

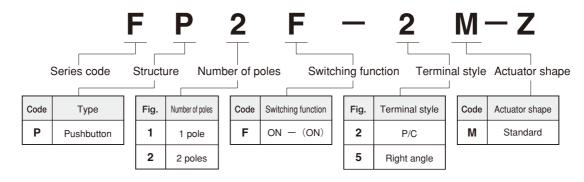
Doting	Max.	0.4VA (28VDC max.)		
Rating	Min.	1μA 20mVDC		
Initial contact resistance		100mΩmax	$(1.5\text{mA} 200 \mu\text{VAC})$	
Dielectric strength		250VAC 1 minute		
Insulation resistance		500MΩmin.	(250VDC)	
Electrical life		10,000 operations at max. rating,		
Operating force		1.47±0.98N		
Operating temperature range		-40~+85℃		
Storage temperature range		-40~+85°C		



### **■ TABLE OF PART NUMBERS**

Number of poles	Switching function	P/C terminal	Right angle
1	ON - (ON)	FP1F-2M-Z	FP1F-5M-Z
2	ON - (ON)	FP2F-2M-Z	FP2F-5M-Z

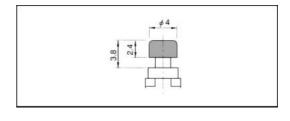
### **■ PART NUMBERING**



### **■ OPTIONAL ACCESSORIES**

Part Name	Dimension	Color	Part Number
	Gloss finish	White	140000481453
Color Cap	<del>  • 4  </del>	Red	140000481452
	4	Black	140000481451
	ABS resin	Gray	140000481450

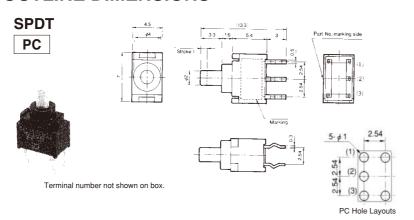
### **■ COLOR CAP MOUNTING**



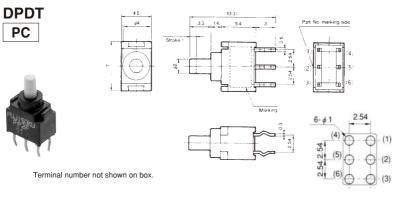
<sup>\*</sup>Please contact us if you can't find your preferable combination in the table of part numbers.

# **FP**HYPER-MINIATURE PUSHBUTTON SWITCHES

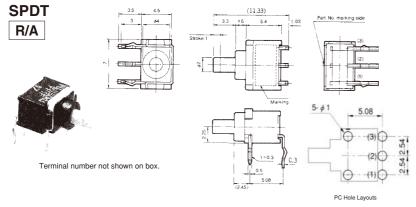
### **■ OUTLINE DIMENSIONS**



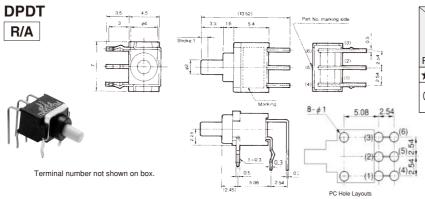
Switching function  Part No.	1	<b>*</b>
FP1F-2M-Z	ON	(ON)
Connecting terminals	2-3	2-1



Switching function  Part No.	1	<b>±</b>
FP2F-2M-Z	ON	(ON)
Connecting terminals	2-3 5-6	2—1 5—4



Switching function  Part No.	I	<b>±</b>
FP1F-5M-Z	ON	(ON)
Connecting terminals	2-3	2-1



Switching function  Part No.	1	<b>±</b>
★FP2F-5M-Z	ON	(ON)
Connecting terminals	2-3 5-6	2-1 5-4

Gray-lined is the switch outline.

(ON): Momentary

# **FP**HYPER-MINIATURE PUSHBUTTON SWITCHES

### **■ PRECAUTIONS**

#### 1. Soldering

(1) Hand solderingDevice : Solder iron380 °C Max. 3 sec. Max.(2) Auto soldering

Device: Wave or dip type 275 °C Max. 6 sec. Max.

Preheat should be within 80-120 °C, 120 sec.

(3) When soldering two or more terminals to the common land, use solder resist to solder them independently.

#### 2. Flux Cleaning

- (1) Solvents: Fluorine or Alcohol type
- (2) Cleaning shall be made when terminal temperature falls to 90 °C or lower. Or, leave the switch at normal temperature for 5 minutes or longer, before cleaning.
- (3) Do not apply ultrasonic cleaning.

### **■ PACKAGING SPECIFICATION**

