
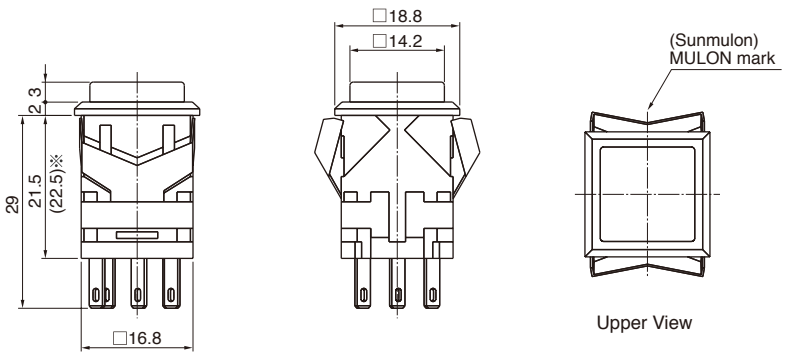
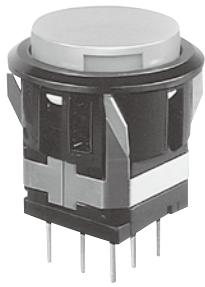
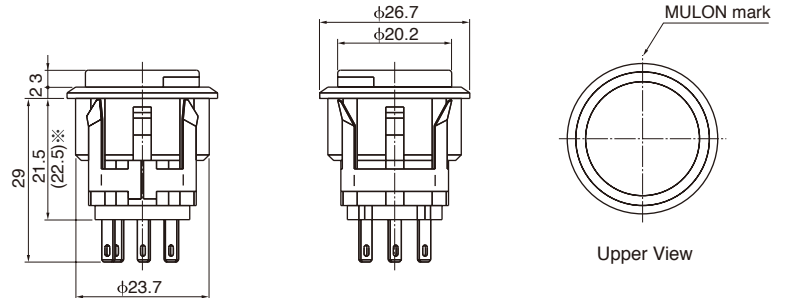


DIMENSIONS

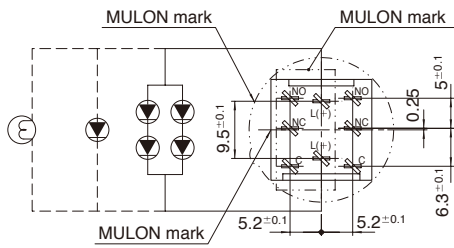
● LED Full Face

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">□ 14.2 Square Button</p> 	 <p>※ PCB type</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">φ 20.2 Round Button</p>  <p>Note : LED full face display is not available with φ20.2 Round type</p>	 <p>※ PCB type</p>

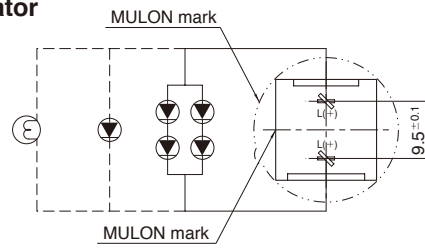
Tolerance : ±0.4mm

TERMINAL LAYOUT / INTERNAL ARRANGEMENT

● Switch

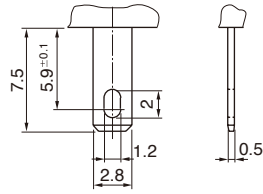


● Indicator

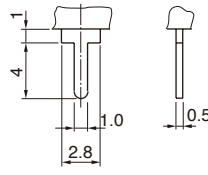


TERMINAL DIMENSIONS

● TERMINAL SHAPE

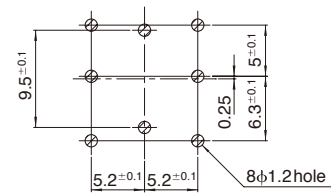


#110 Tab/Solder Terminal



Printed Circuit Terminal

● Printed Circuit Terminal Hole Dimensions (BOTTOM VIEW)



LED DATA

● LED Full Face Display (Calculated at 4 chips LED)

ITEM	LED Full Face	
	Parallel	
	Red, Yellow	Green
Max. Operating Current I_{FM} (mA)	40	40
DC Reverse Voltage V_R (V)	10	10
Forward Voltage V_F (V)	4	4.2
Recommended Operating Current I_F (mA)	15	25

※ In case of pulse lighting, please note following conditions.

$I_{FM}=120\text{mA}$ (DC current for one LED, all colors)

Where : Pulse width(PW)=100 μ sec.

Duty Ratio (DR)=10⁻¹

EXTERNAL / STABILIZED RESISTOR

Internal LED protective or Neon stabilized resistor are not incorporated. Refer to the following values for series connection.

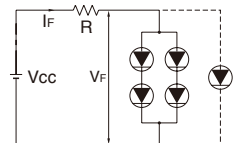
● LED Full Face Display (Calculated at 4 chips LED)

Voltage(V)	Red, Yellow	Green
5V (±5%)	100 Ω 1/8W	33 Ω 1/8W
14V (±5%)	620 Ω 1/4W	330 Ω 1/4W
28V (±5%)	1500 Ω 1/2W	820 Ω 1/2W

The value of the series resistor can be determined by the formula:

$$R = \frac{V_{CC} - V_F}{I_F}$$

V_{CC} : Supply Voltage
 V_F : Forward Voltage
 I_F : Forward Current



PANEL LAYOUT / PANEL CUT DIMENSIONS

● 14.2 Square Button

Panel thickness 1mm~3.2mm

		Panel Layout	Panel Cut Dimensions
Without Barriers	Independent		
	Serial		
With Barriers	Independent		
	Serial		

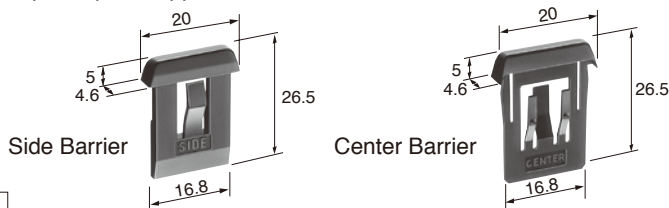
● φ20.2 Round Button

Panel Layout	Panel Cut Dimensions

OPTIONAL ACCESSORIES

Barriers

- Using Barriers helps prevent inadvertent actuation of neighboring switches with one push, if strip mounting is required. Also, they may improve panel appearance.

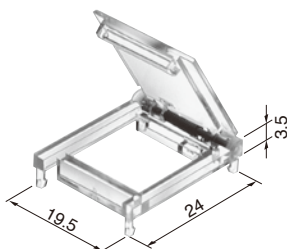


Color	Center Barrier	Side Barrier
Black	DH-324-B	DH-323-B
White	DH-324-W	DH-323-W

Guard Cover

- Guard Cover prevents inadvertent or unintentional operations. Button cannot be operated unless open clear cover. Guard Cover is used with Guard Side or Guard Center Barriers. For strip mount, panel cutout dimensions are same as Barriers.

● 14.2 Square Button



Guard Center Barrier



Guard Side Barrier

Guard Cover	DH-450
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※ Cover to be opened 180°

Color	Guard Center Barrier	Guard Side Barrier
Black	DH-443-B	DH-442-B
White	DH-443-W	DH-442-W

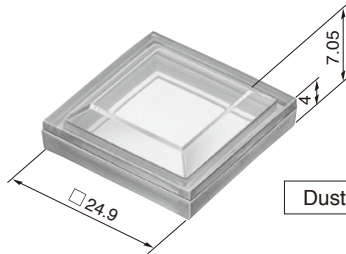
Tolerance : ±0.4mm

ACCESSORIES

Dust-Proof Cover

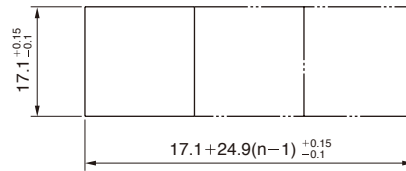
- Provides protection for switches or indicators from dust entering through the panel cutout.
Please indicate parts numbers when order.

- 14.2 Square Button only



Dust-Proof Cover DH-361

- Panel Cut Dimensions

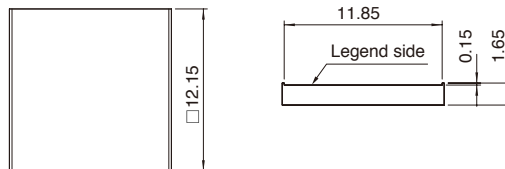


Panel thickness 1mm~2.5mm

n : Number of Switches

* Dust-proof cover cannot be fitted with barriers or guard cover.

FILTER DIMENSIONS



REPLACEMENT PARTS

Please indicate parts Nos. when order

LED Full Face Display

- One-piece type

Color		Part No.	
		□14.2 Square	
Solid Color	Red	DH-336-1LR	
	Green	DH-336-1LG	
	Yellow	DH-336-1LY	
Projected Color	Milk White	DH-336-1M	

- Three-piece type

Color		Part No.	
		□14.2 Square Button	□12.15 Square Filter
Solid Color	Red	DH-336-2C	DH-339-LR
	Green	DH-336-2C	DH-339-LG
	Yellow	DH-336-2C	DH-339-LY
Projected Color	Milk White	DH-336-2C	DH-339-M

Lamp Display

- One-piece type

Color	Part No.	
	□14.2 Square Button	φ20.2 Round Button
Red	DH-336-1R	DH-298-R
Green	DH-336-1G	DH-298-G
Yellow	DH-336-1Y	DH-298-Y
Black	DH-336-1K	DH-298-K
Milk White	DH-336-1M	DH-298-M

- Three-piece type

Color		Part No.	
		□14.2 Square Button	□12.15 Square Filter
Solid Color	Red	DH-336-2C	DH-339-R
	Milk White	DH-336-2C	DH-339-M
	Yellow	DH-336-2C	DH-339-Y
	Green	DH-336-2C	DH-339-G
Projected Color	Red	DH-336-1M	DH-339-R
	Yellow	DH-336-1M	DH-339-Y
	Green	DH-336-1M	DH-339-G

Tolerance : ±0.4mm

ORDERING CODE

LED Full Face Display



● Operation

M	Momentary
A	Alternate
L	Indicator

● Contact Arrangement / Material

0	Indicator
1	Silver, SPDT
2	Silver, DPDT
3	Gold Plated Silver, SPDT
4	Gold Plated Silver, DPDT

● Button Shape

S	□14.2 Square
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● LED Color

70	Red
80	Green
※ 90	Yellow

● Terminal Shape

Blank	#110 Tab/Solder
C	Printed Circuit

● Filter Color (For Clear Button only)

Blank	Without Filter
1	Red
※ 3	Yellow
4	Green
5	Milk White

● Housing Color

B	Black
W	White

● Button Color

R	Red
※ Y	Yellow
G	Green
M	Milk White
C	Clear
X	Without Button

※ "Yellow" color for LED/Button/Filter is actually "Orange Yellow".

Lamp Display



● Operation

M	Momentary
A	Alternate
L	Indicator

● Contact Arrangement / Material

0	Indicator
1	Silver, SPDT
2	Silver, DPDT
3	Gold Plated Silver, SPDT
4	Gold Plated Silver, DPDT

● Button Shape

S	□14.2 Square
R	φ20.2 Round

● Lamp Voltage

Blank	Without Socket
0	Without Lamp

● Terminal Shape

Blank	#110 Tab/Solder
C	Printed Circuit

● Filter Color (For Clear Button only)

Blank	Without Filter
1	Red
3	Yellow
4	Green
5	Milk White

● Housing Color

B	Black
W	White

● Button Color

R	Red
Y	Yellow
G	Green
K	Black
M	Milk White
※ C	Clear
X	Without Button

※ Clear Button is only for 14.2 Square type.