

# ML LED Indicator

**Bright and Variable Illumination makes easy planning of multiple design. Dome type which is easy to recognize illumination also available.**

**30mm square and round type indicator with easy  $\phi$ 25mm hole mounting.**

**■ FEATURES**

- Size and Shape : 30mm square flat type and dome type. 30mm round flat type and dome type.
- Depth behind panel : Only 29mm
- Illumination : Mono-Color, Dual-Color (simultaneous lighting available)
- LED Color : Hi-Bright LED Super Blue, Super White, Super Green added to Red, Green, Yellow.
- Mounting :  $\phi$ 25mm hole mounting with screwing.
- Terminal : #187 Tab/Solder and Screw provided.
- Protection : Oil and Water-Tight (IP65) type available.



## SPECIFICATIONS

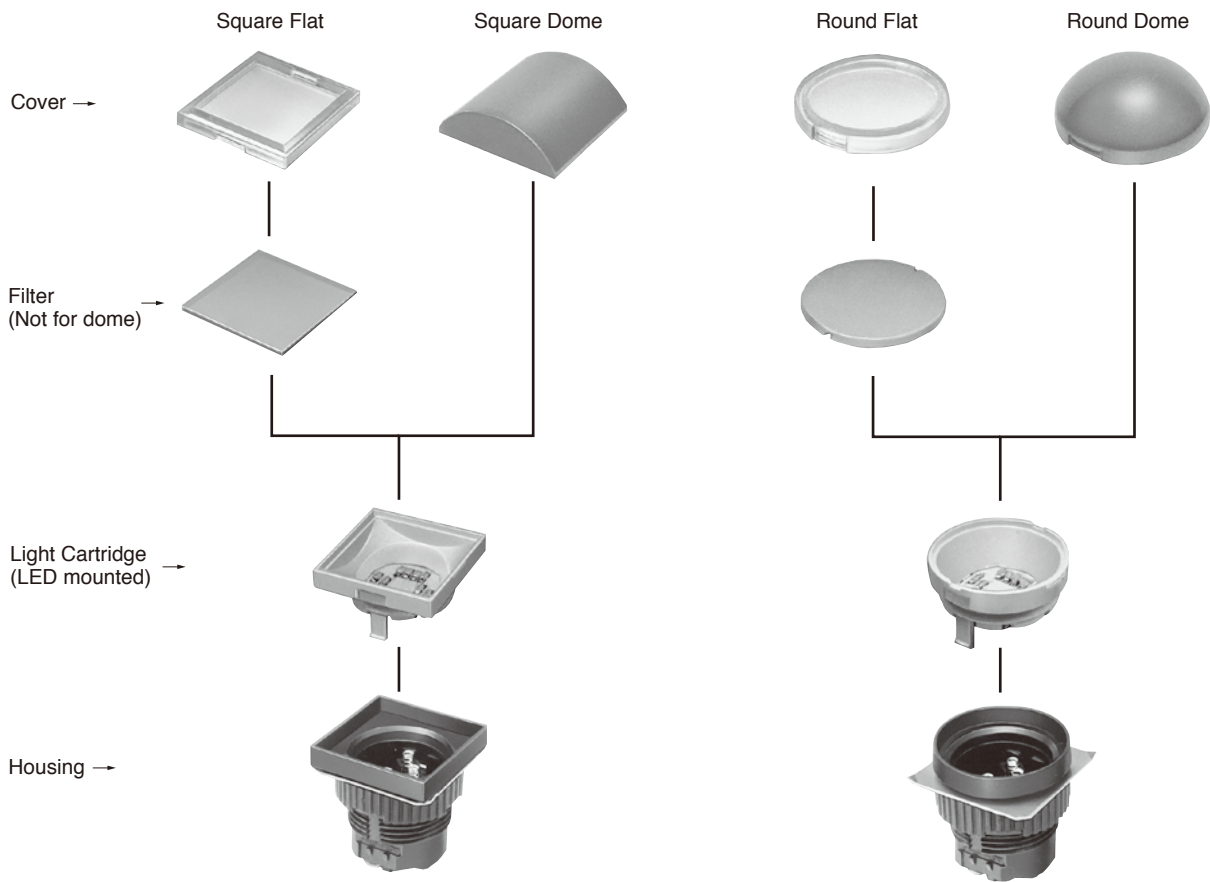
Item	SPECIFICATIONS
Insulation Resistance	More than 100M $\Omega$ at 500V DC
Dielectric Strength	1500V AC RMS between terminals and ground 50/60Hz for 60sec. At normal ambient temperature and humidity
Ambient Temperature	-10 $^{\circ}$ C~40 $^{\circ}$ C
Ambient Humidity	45~85%RH

## LED DATA

\* R=Red, Y=Yellow, G=Green, SB=Super Blue, SW=Super White, SG=Super Green

DC Supply Voltage (V)	Current Rating (mA)											
	Mono-Color						Dual-Color					
	R	G	OY	SB	SW	SG	R	G	OY	SB	SW	SG
DC12V ( $\pm$ 5%)	12	28	28	22	10	24	12	22	16	9	6	9
DC24V ( $\pm$ 5%)	6	14	14	11	5	12	6	11	8	5	4	5

## STRUCTURE



## DIMENSIONS

30mm square	Flat type				<p>Top View</p>
	Dome type				<p>Top View</p>

Tolerance :  $\pm 0.4\text{mm}$

DIMENSIONS

30mm round	Flat type				
	Dome type				

INTERNAL CONNECTION ARRANGEMENTS

\* R=Red, Y=Yellow, G=Green, SB=Super Blue, SW=Super White, SG=Super Green

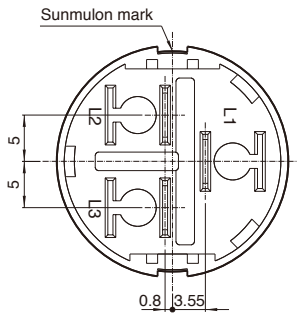
Mono-Color	12V	<b>R, G, Y</b>		<b>SB, SW, SG</b>		
		24V				
	Dual-Color	12V	<b>Combination of R, G, Y</b>		<b>Combination of R, G, Y and SB, SW, SG</b>	
			24V			

● Dual-Color Combination

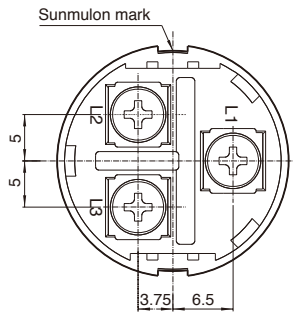
L1-L2	R	G	OY	SB	SB	SB
L1-L3	G	OY	R	R	G	OY
L1-L2	SW	SW	SW	SG	SG	SG
L1-L3	R	G	OY	R	G	OY

## TERMINALS

### ● TERMINAL LAYOUT



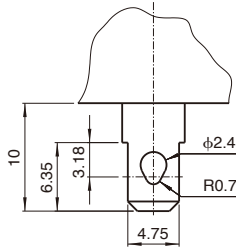
#187 Tab/solder terminal



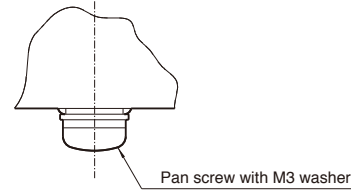
Screw terminal

Terminal No.	Mono-Color	Dual-Color
L1	Anode(+)	Anode(+)
L2	Cathode(-)	Cathode(-)
L3		Cathode(-)

### ● TERMINAL SHAPE



#187 Tab/solder terminal



Screw terminal

## Panel Layout / Panel Cut Dimensions

Panel thickness: 1~6mm

	Panel Layout	Panel Cut Dimensions
Square Flat		
Square Dome		
Round Flat		
Round Dome		

n : number of unit (horizontal) m : number of unit (vertical)  
 \*Panel Cut Dimension should be after panel paintings.

Tolerance : ±0.4mm

## MOUNTING TOOL

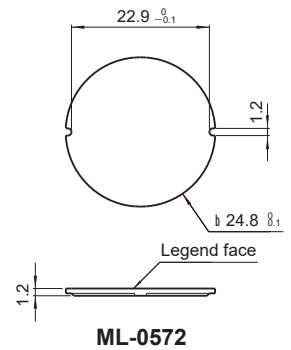
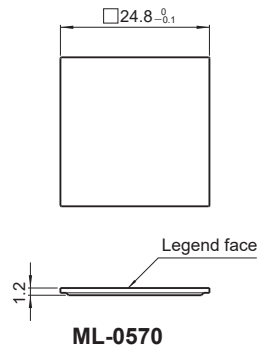
### ● Mounting Tool

Part No. : ML-0610

Recommended tool for mounting unit on panel.



## FILTER DIMENSIONS



## REPLACEMENT PARTS

### ● COVER

Color	Clear	Red	Green	Orenge Yellow	Yellow	Blue	Milk White
Item	Clear	Red	Green	Orenge Yellow	Yellow	Blue	Milk White
Square Flat	ML-0566-CC						
Square Dome		ML-0568-LR	ML-0568-LG	ML-0568-LO	ML-0568-LY	ML-0568-LB	ML-0568-LM
Round Flat	ML-0567-CC						
Round Dome		ML-0569-LR	ML-0569-LG	ML-0569-LO	ML-0569-LY	ML-0569-LB	ML-0569-LM

### ● FILTER

Color	Red	Green	Orenge Yellow	Yellow	Blue	Milk White
Item	Red	Green	Orenge Yellow	Yellow	Blue	Milk White
Square	ML-0570-LR	ML-0570-LG	ML-0570-LO	ML-0570-LY	ML-0570-LB	ML-0570-LM
Round	ML-0572-LR	ML-0572-LG	ML-0572-LO	ML-0572-LY	ML-0572-LB	ML-0572-LM

## ACCESSORIES

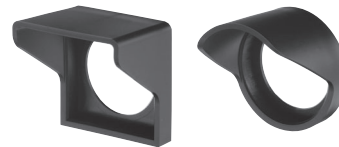
### Terminal cover



PART No. ML-1561

\* For screw terminals

### Shade hood

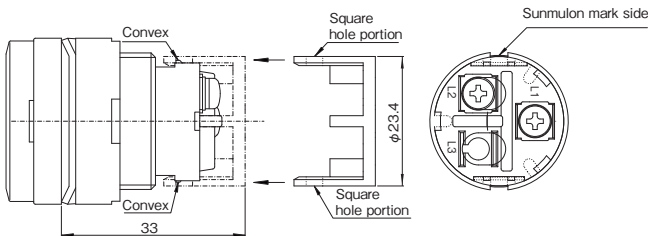


Shape	Part No.
Square	ML-1568
Round	ML-1567

\* A piece of rubber packing is set inside.

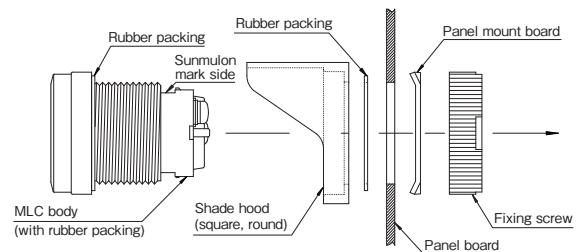
### ● Installing the terminal cover

\*Only screw terminals can be used

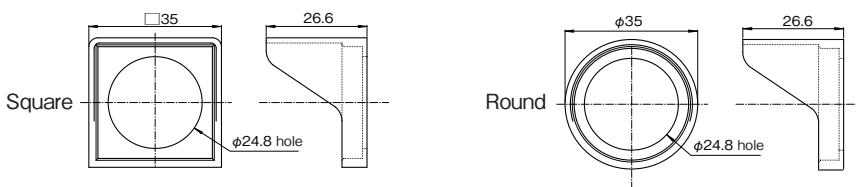


### ● Installing the shade hood (square and round)

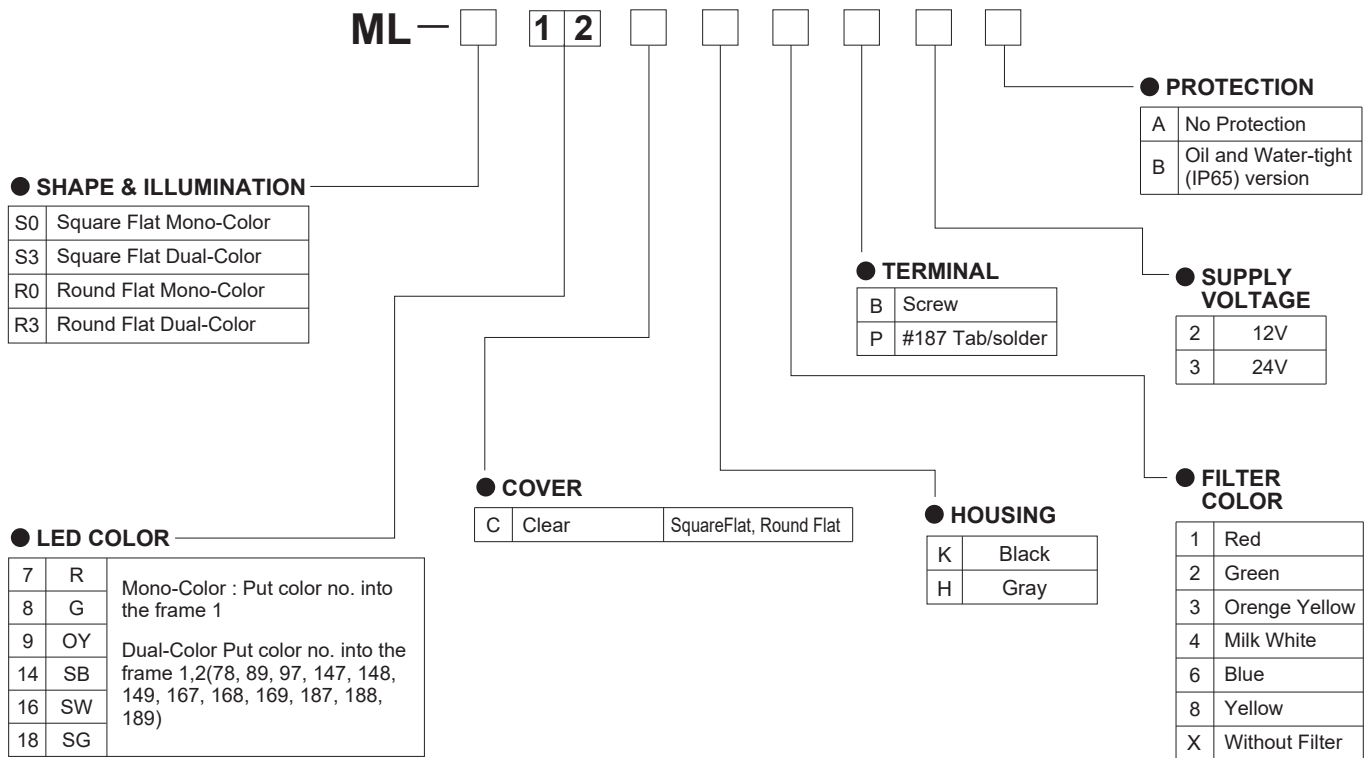
\* With water resistant structure (Otherwise rubber packing is not required)



### ● Shade hood dimensions



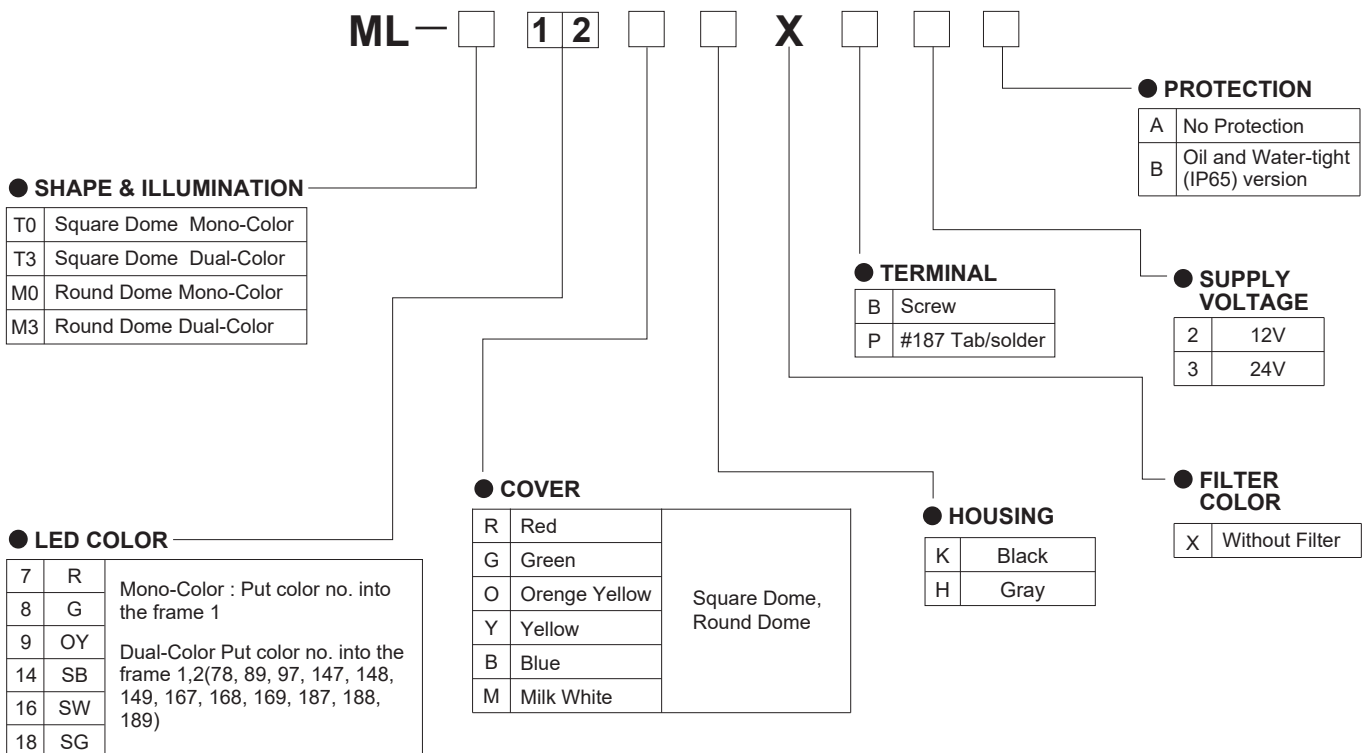
## ORDERING CODE (Flat type)



**● NOTES**

- 1) Dual-Color combination : 78, 89, 97, 147,148, 149, 167, 168, 169, 187, 188, 189 only.
- 2) In case of selecting Yellow Filter, LED Color should be selected 8(green).

## ORDERING CODE (Dome type)



**● NOTES**

- 1) Dual-Color combination : 78, 89, 97, 147,148, 149, 167, 168, 169, 187, 188, 189 only. Cover to be Milk-White.
- 2) In case of selecting Yellow Cover, LED Color should be selected 8(green).