

MLC Indicator

MLC

High visibility even in sunlight,
 ϕ 25 mm hole mounting, IP65

TYP.7000 cd/m² (reference value) Ultrabright LED with diamond cut cover

- Display surface : 29 mm Square flat, 30 mm Square dome, 29 mm Round flat and dome
- Depth behind panel : 29 mm
- Terminal : #187 Tab • Soldering and screw
- Mounting : Screw mounting
- Illumination type : Full-Face, Dual-Color
- Accessories : Shade hood and terminal cover



CHARACTERISTICS

Display Surface Size	□ 30 mm, ϕ 30 mm
Illumination Color	Red, Green, Yellow Super White (for lighting)
Illumination Type	Full-Face, Dual-Color, Negative
Display Surface Shape	Flat, Dome
Supply Voltage	DC 12 V, 24 V \pm 5%
Consumption Current	60mA max.
Terminal Shape	Screw, #187 Tab • soldering
Insulation Resistance	More than 100 M Ω at DC 500 V
Dielectric Strength	AC 1500 V RMS between each terminals and ground 50/60 Hz for 60 sec. at normal ambient temperature and humidity
Peak Reverse Voltage	150V
Ambient Operating Temperature	-10°C to 50°C (No Freeze, No Condensation)
Ambient Operating Temperature	-10°C to 40°C (No Freeze, No Condensation)
Ambient Operating Humidity	80%RH max. (No Condensation)
Ambient Storage Temperature	-25°C to 65°C (No Freeze, No Condensation)
Ambient Storage Humidity	85%RH max. (No Condensation)
RoHS (10 Substances)	Conform to standards

SPECIFICATIONS

Display surface shape	Illumination type	Indicator	Lighting
Flat	Full-Face	A	A
	Dual-Color	A	N/A
Dome	Full-Face	A	A
	Dual-Color	A	N/A
Illumination Color	Red (701)	A	N/A
	Super Green (181)	A	N/A
	Yellow (901)	A	N/A
	Super White (161)	N/A	A

A : Applicable N/A : Not applicable

The ultrabright white LED is available for lighting



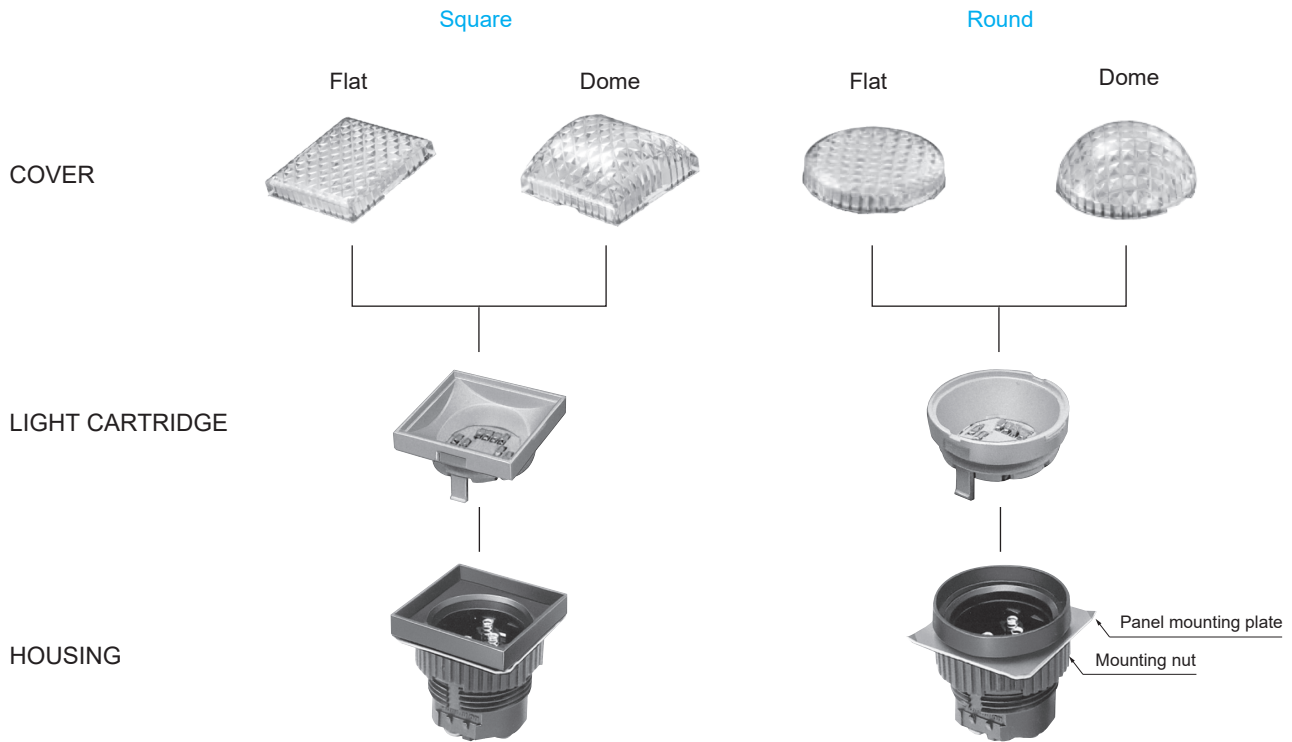
Reference illuminance : Approx. 70 lux
in a place 50 cm just below the lighting.

https://www.sunmulon.co.jp/english/products/led_e/mlc.html

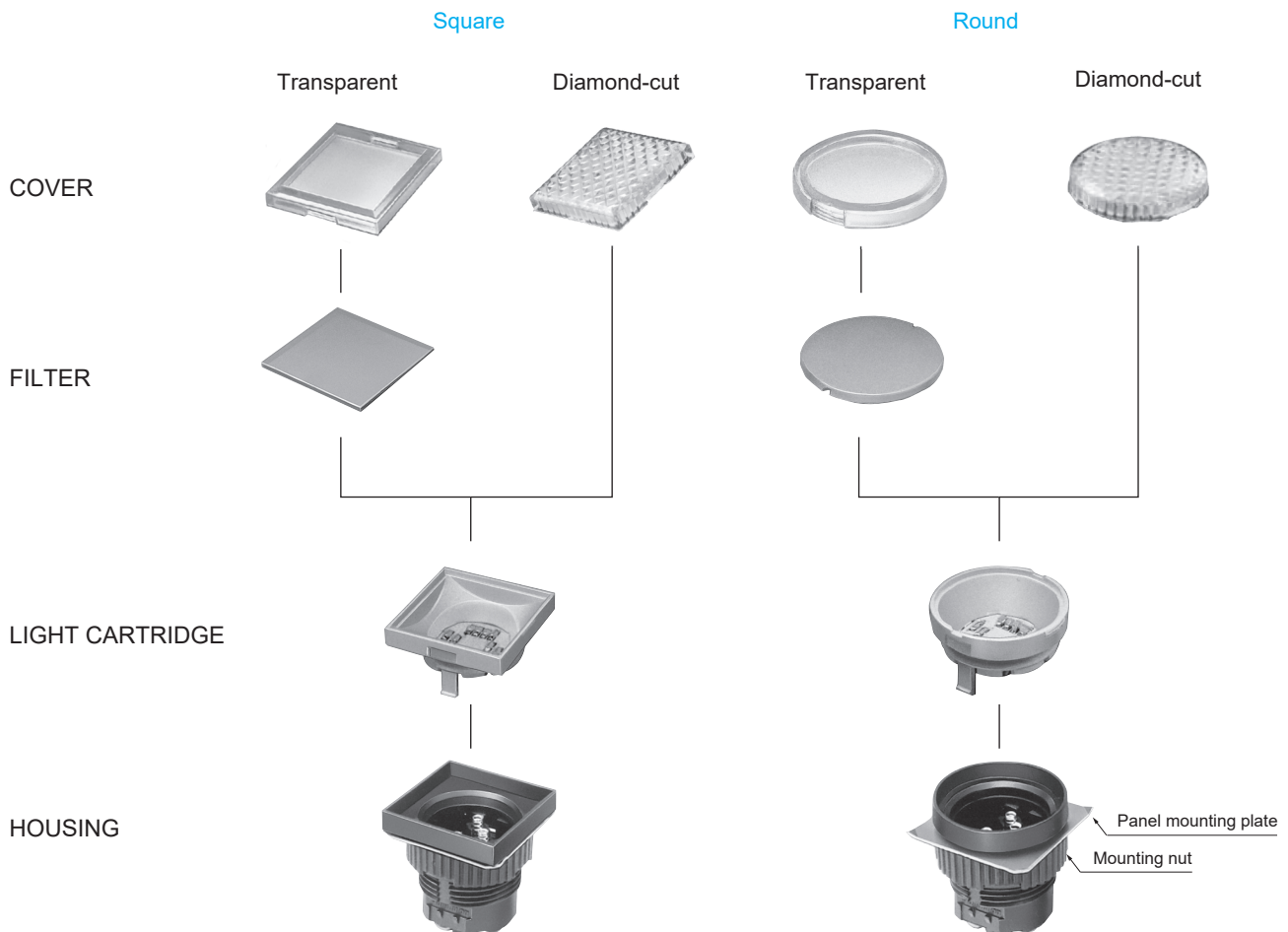


- ◇Dimensions : page MLC-3~4
- ◇Accessories : page MLC-5
- ◇Ordering code : page MLC-6~8
- ◇Internal connection arrangements : page MLC-10
- ◇LED specifications : page MLC-10
- ◇Terminals : page MLC-12
- ◇Mounting design / Panel cutout : page MLC-12

STRUCTURE [INDICATOR]


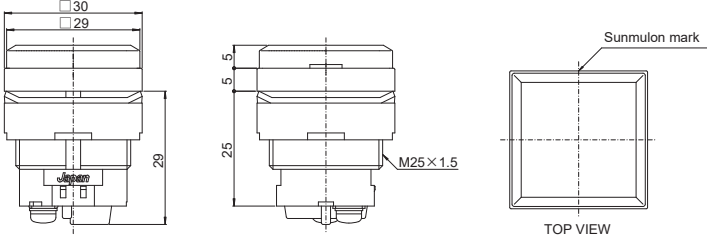

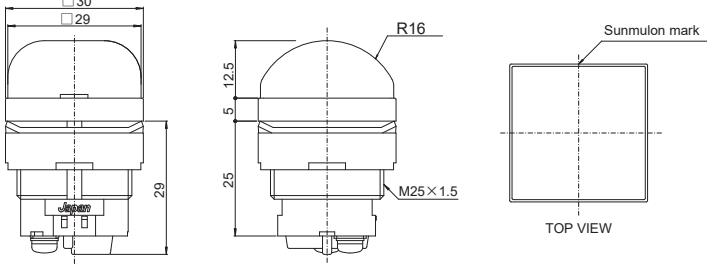

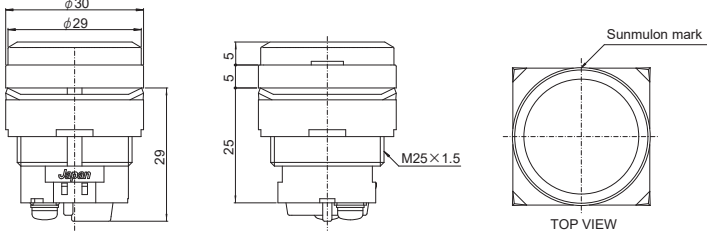

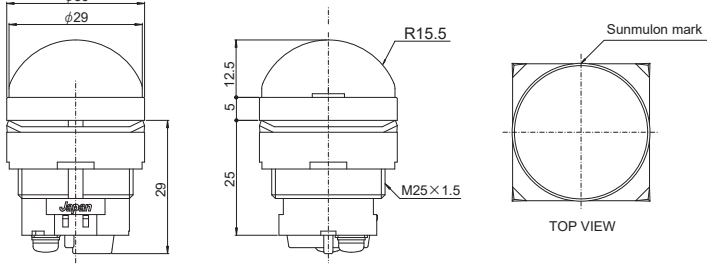


STRUCTURE [LIGHTING]



DIMENSIONS

● Screw mounting terminal type

<p>Square Flat</p>  <p>3D DXF</p>	
<p>Square Dome</p>  <p>3D DXF</p>	
<p>Round Flat</p>  <p>3D DXF</p>	
<p>Round Dome</p>  <p>3D DXF</p>	


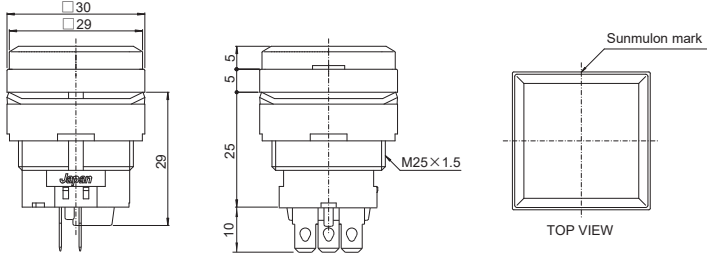

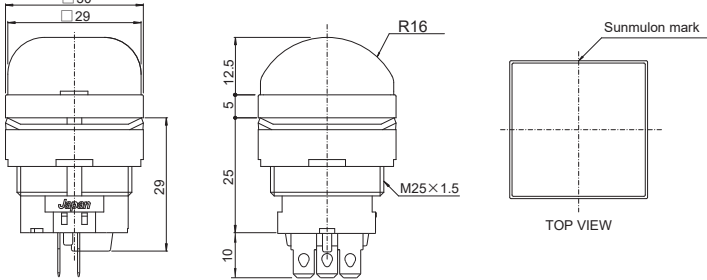

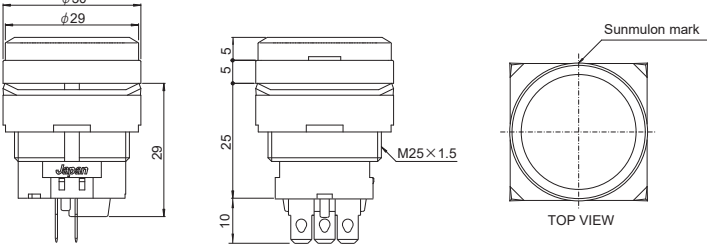

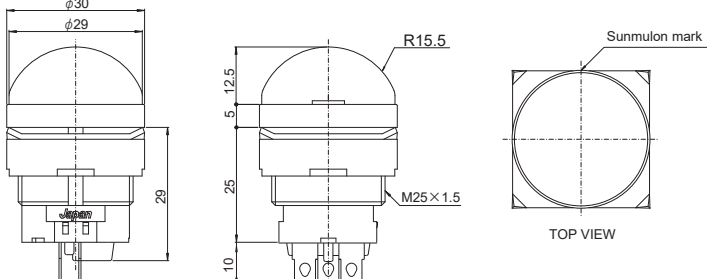
※ MLC indicator is different in height compared to ML indicator.

3D・DXF data download site : <https://www.sunmulon.co.jp/download/>

Tolerance : ± 0.4 mm

DIMENSIONS

● #187 Tab • Soldering terminal type





<p>Square Flat</p>  <p>3D DXF</p>	
<p>Square Dome</p>  <p>3D DXF</p>	
<p>Round Flat</p>  <p>3D DXF</p>	
<p>Round Dome</p>  <p>3D DXF</p>	

※ MLC indicator is different in height compared to ML indicator.

3D • DXF data download site : <https://www.sunmulon.co.jp/download/>

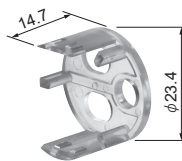
Tolerance : ± 0.4 mm

ACCESSORIES

Name	Appearance	Classification	Part no.	Precautions for use
Terminal cover DXF		For screw mounting	ML-1561	- Use screw mounting terminal type for housing.
Shade hood DXF		For square	ML-1568	※ One rubber packing is attached. - When used as a water-tight type, use with rubber packing.
		For round	ML-1567	
Tightening tool		For tightening housing screw	ML-0610	- Be used to tightening housing screw.

Terminal cover for Screw terminal

Part no. ML-1561

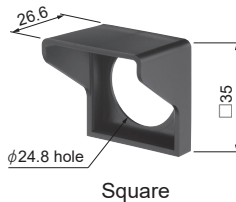


Shade hood

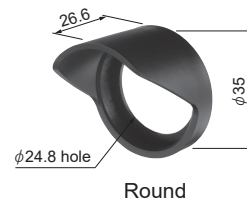
Square ML-1568

Round ML-1567

※ One rubber packing is set.



Square

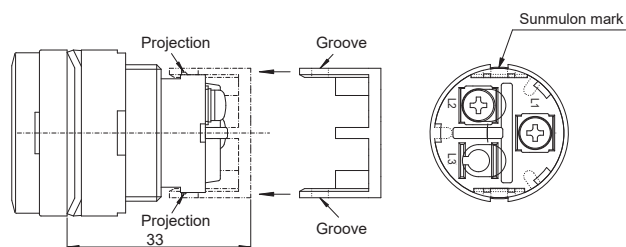


Round

● Installing the terminal cover

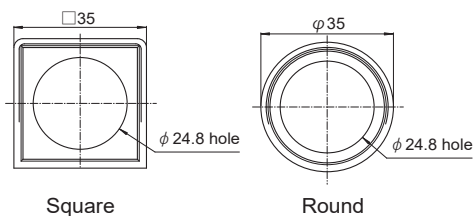
※ Only screw terminals can be mounted.

Align the groove on the terminal cover, the projection on the housing, and fit the terminal cover until click.



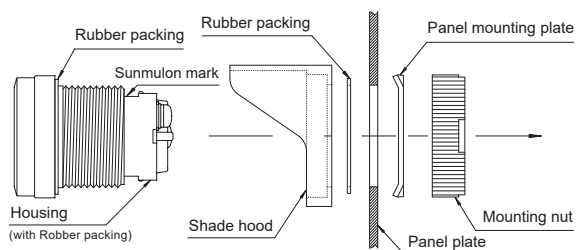
● Installing the shade hood (Square and Round)

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



Square

Round



ORDERING CODE [Full-Face]

Assembled Part
Flat



● **SHAPE**

S0	Square Flat
R0	Round Flat

● **LED COLOR**

701	Red
181	Super Green
901	Yellow
X	Without LED ※2)

Yellow (901) is actually "Orange Yellow" not Lemon Yellow.

● **COVER COLOR**

DC	Diamond-cut
X	Without cover ※1)

● **HOUSING COLOR**

K	Black
H	Gray

MLC— [] [] [] [] X [] [] []

● **PROTECTION**

A	No Protection
B	Oil and Water-tight (IP65) version

● **Supply Voltage to LED**

2	DC12V Built-in resistor
3	DC24V Built-in resistor
5	DC12V Non-resistor
6	DC24V Non-resistor
X	Without LED

For Non-resistor type, use external protective resistor.

● **TERMINAL ※2)**

B	Screw
P	# 187 Tab·Soldering
X	Without terminal (Without LED only)

● **FILTER COLOR**

X	Without filter
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Assembled Part
Dome



● **SHAPE**

T0	Square Flat
M0	Round Flat

● **LED COLOR**

701	Red
181	Super Green
901	Yellow
X	Without LED ※2)

Yellow (901) is actually "Orange Yellow" not Lemon Yellow.

● **COVER COLOR**

DC	Diamond-cut ※1)
----	-----------------

● **HOUSING COLOR**

K	Black
H	Gray

MLC— [] [] DC [] X [] [] []

● **PROTECTION**

A	No Protection
B	Oil and Water-tight (IP65) version

● **Supply Voltage to LED**

2	DC12V Built-in resistor
3	DC24V Built-in resistor
5	DC12V Non-resistor
6	DC24V Non-resistor
X	Without LED

For Non-resistor type, use external protective resistor.

● **TERMINAL ※2)**

B	Screw
P	# 187 Tab·Soldering
X	Without terminal (Without LED only)

● **FILTER COLOR**

X	Without filter
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● **NOTES**

- ※1) To specify without cover, specify form flat type ordering code. Dome type cannot be specified without a cover.
- ※2) The terminal without LED can be specified as B, P, X, but they are dummy terminals.

◇Dimensions : page MLC-3~4
◇LED specifications : page MLC-10

◇Accessories : page MLC-5
◇Terminals : page MLC-12

◇Internal connection arrangements : page MLC-10
◇Mounting design / Panel cutout : page MLC-12

ORDERING CODE [Dual-Color]

Assembled Part
Flat



● **SHAPE**

S3	Square Flat
R3	Round Flat

● **LED COLOR**

701181	Red · Super Green
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● **COVER COLOR**

DC	Diamond-cut
X	Without cover ※1)

● **HOUSING COLOR**

K	Black
H	Gray

MLC — [] [] [] [] X [] [] []

● **PROTECTION**

A	No Protection
B	Oil and Water-tight (IP65) version

● **Supply Voltage to LED**

2	DC12V Built-in resistor
3	DC24V Built-in resistor
5	DC12V Non-resistor
6	DC24V Non-resistor

For Non-resistor type, use external protective resistor.

● **TERMINAL**

B	Screw
P	# 187 Tab · Soldering

● **FILTER COLOR**

X	Without filter
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Assembled Part
Dome



● **SHAPE**

T3	Square Flat
M3	Round Flat

● **LED COLOR**

701181	Red · Super Green
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● **COVER COLOR**

DC	Diamond-cut ※1)
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● **HOUSING COLOR**

K	Black
H	Gray

MLC — [] [] DC [] X [] [] []

● **PROTECTION**

A	No Protection
B	Oil and Water-tight (IP65) version

● **Supply Voltage to LED**

2	DC12V Built-in resistor
3	DC24V Built-in resistor
5	DC12V Non-resistor
6	DC24V Non-resistor

For Non-resistor type, use external protective resistor.

● **TERMINAL**

B	Screw
P	# 187 Tab · Soldering

● **FILTER COLOR**

X	Without filter
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● **NOTES**

※1) To specify without cover, specify form flat type ordering code. Dome type cannot be specified without a cover.

◇Dimensions : page MLC-3~4

◇LED specifications : page MLC-10

◇Accessories : page MLC-5

◇Terminals : page MLC-12

◇Internal connection arrangements : page MLC-10

◇Mounting design / Panel cutout : page MLC-12

ORDERING CODE [Lighting]

Assembled Part
Flat



MLC — 161

● **SHAPE**

S0	Square Flat
R0	Round Flat

● **LED COLOR**

161	Super White
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● **COVER COLOR**

DC	Diamond-cut	※1)
C	Transparent	
X	Without cover	※2)

● **HOUSING COLOR**

K	Black
H	Gray

● **PROTECTION**

A	No Protection
B	Oil and Water-tight (IP65) version

● **Supply Voltage to LED**

2	DC12V Built-in resistor
3	DC24V Built-in resistor

● **TERMINAL**

B	Screw
P	# 187 Tab·Soldering

● **FILTER COLOR**

4	Milk-white	
9	Transparent	
X	Without filter	※1,2)

● **NOTES**

- ※1) To specify Diamond-cut cover (DC), specify without filter (X).
- ※2) For without cover (X), specify without filter (X).

◇Dimensions : page MLC-3~4
◇LED specifications : page MLC-10

◇Accessories : page MLC-5
◇Terminals : page MLC-12

◇Internal connection arrangements : page MLC-10
◇Mounting design / Panel cutout : page MLC-12

REPLACEMENT PARTS

● Full-Face COVER

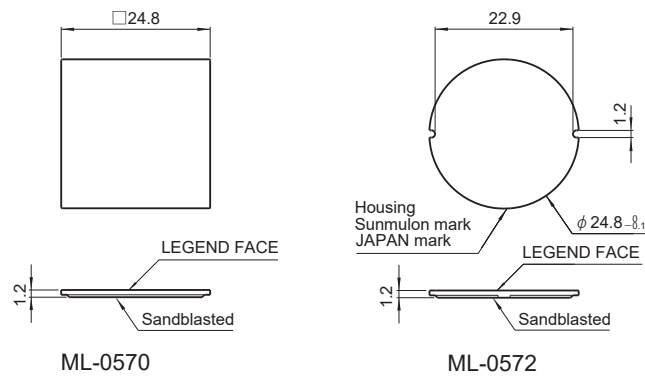
		Shape	Transparent
Cover	Square	Flat (Diamond-cut)	ML-1556-CC
		Dome (Diamond-cut)	ML-1558-CC
	Round	Flat (Diamond-cut)	ML-1555-CC
		Dome (Diamond-cut)	ML-1557-CC

● Lighting COVER/FILTER

		Shape	Transparent	Milk-white
Cover	Square	Flat (Diamond-cut)	ML-1556-CC	
		Flat (Transparent)	ML-0566-CC	
	Round	Flat (Diamond-cut)	ML-1555-CC	
		Flat (Transparent)	ML-0567-CC	
Filter	Square		ML-0570-CC	ML-0570-LM
	Round		ML-0572-CC	ML-0572-LM

※ Filters cannot be used with the Diamond-cut cover.
 ※ The transparent filter is sandblasted.

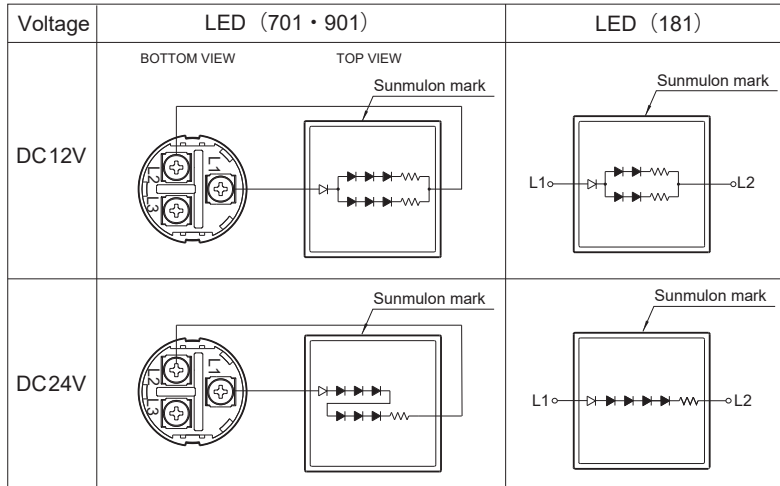
FILTER DIMENSIONS



Tolerance : ± 0.4 mm

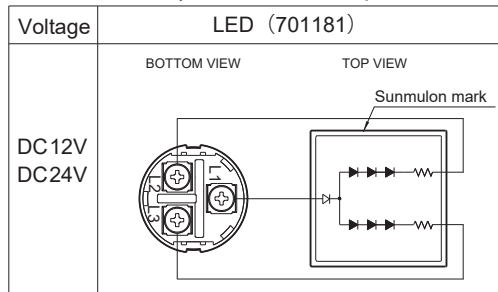
INTERNAL CONNECTION ARRANGEMENTS

● Full-Face (Common for Square, Round)



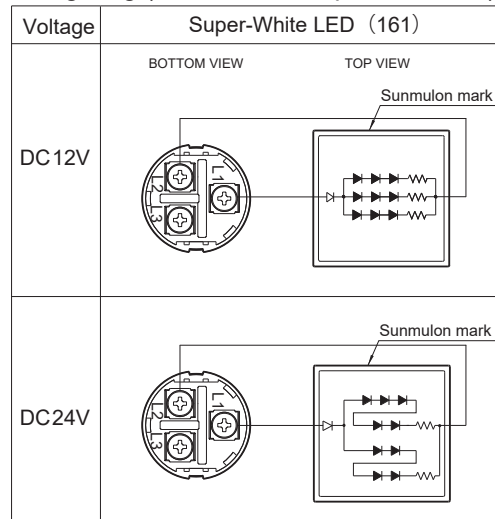
LED color : 701 (Red), 901 (Yellow), 181 (Super-Green)

● Dual-Color (Common for Square, Round)



LED color : 701 (Red), 181 (Super-Green)

● Lighting (Common for Square, Round)



● Dual-Color combination (Common for each voltage)

Terminals	LED Color
L1-L2	Red
L1-L3	Super Green

※ Simultaneous lighting is not possible for Dual-Color.

LED SPECIFICATIONS

● Full-Face

Voltage		Rated Current (mA)		
		Red	Super-Green	Yellow
DC12V	±5%	56	26	48
DC24V	±5%	28	13	24

● Dual-Color

Voltage		Rated Current (mA)	
		Red	Super-Green
DC12V	±5%	25	25
DC24V	±5%	25	25

● Lighting

Voltage	Rated Current (mA)
DC12V	±5% 40
DC24V	±5% 25

External Resistor Data

For LED external resistors, calculate the resistance value with reference to the following.

● Full-Face

Ta=25°C

Supply Voltage		DC12V			DC24V		
LED Color		Red	Super Green	Yellow	Red	Super Green	Yellow
Max. Forward Current	I_{FM} (mA)	60	60	30	30	30	30
DC Reverse Voltage	V_R (V)	150	150	150	150	150	150
Diode Forward Voltage	V_D (V)	0.8	0.8	0.8	0.8	0.8	0.8
Forward Voltage	V_F (Typ.) [$I_F=20mA$] (V)	6.3	6.2	6.6	12.6	12.4	13.2
LED current reduction ratio	(mA/°C)	2 (85~100)	1.2 (75~110)	2 (85~100)	1 (85~100)	0.6 (75~110)	1 (85~100)
Pulse Lighting	Pulse Width PW (μs)	100					
	Duty Ratio DR	10 ⁻¹					
	LED current reduction ratio (mA/°C)	8 (85~100)	1.2 (75~110)	8 (85~100)	4 (85~100)	0.6 (75~110)	4 (85~100)
Wiring Diagram		Figure 1			Figure 2		

※ Between t1°C and t2°C are reference values for the range of current reduction and current derating (from start temperature to maximum temperature).

● Dual-Color

Ta=25°C

Supply Voltage		DC12・24V	
LED Color		Red	Super Green
Max. Forward Current	I_{FM} (mA)	30	30
DC Reverse Voltage	V_R (V)	150	150
Diode Forward Voltage	V_D (V)	0.8	0.8
Forward Voltage	V_F (Typ.) [$I_F=20mA$] (V)	6.3	9.3
LED current reduction ratio	(mA/°C)	1 (85~100)	0.6 (75~110)
Pulse Lighting	Pulse Width PW (μs)	100	
	Duty Ratio DR	10 ⁻¹	
	LED current reduction ratio (mA/°C)	4 (85~100)	0.6 (75~110)
Wiring Diagram		Figure 3	

※ Between t1°C and t2°C are reference values for the range of current reduction and current derating (from start temperature to maximum temperature).

Refer to the following formula to calculate external resistance values.

Figure 1
$$R = \frac{V_{DD} - V_D - V_r - V_F}{I_F}$$

Figure 2
$$R = \frac{V_{DD} - V_D - V_F}{I_F}$$

$$(V_r = \frac{I_F}{2} \cdot r \quad r=16\Omega)$$

V_{DD} : Supply Voltage

V_F : Forward Voltage

I_F : Forward Current

V_D : Diode Forward Voltage

I_F (Forward Current) : Refer to the Rated Current of BUILT-IN RESISTOR type, and be sure to set less than I_{FM} (Max. Forward Current).

● Wiring Diagram

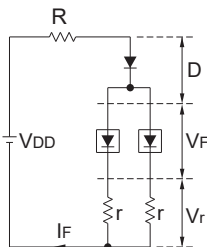


Figure 1

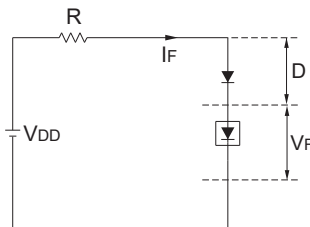


Figure 2

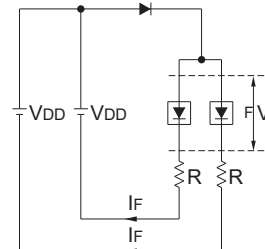


Figure 3

r : Install the resistor for forward voltage equilibrium stability of LEDs.

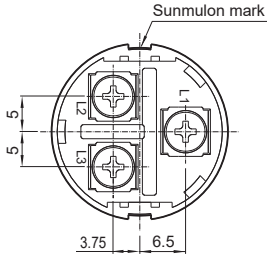
For resistance value calculation

<https://www.sunmulon.co.jp/english/products/led.html>

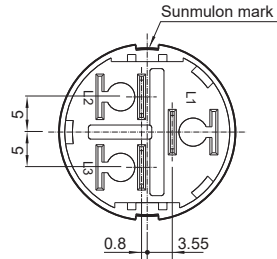
The resistance value can be calculated just by entering the items.

TERMINALS

● TERMINALS LAYOUT (BOTTOM VIEW)



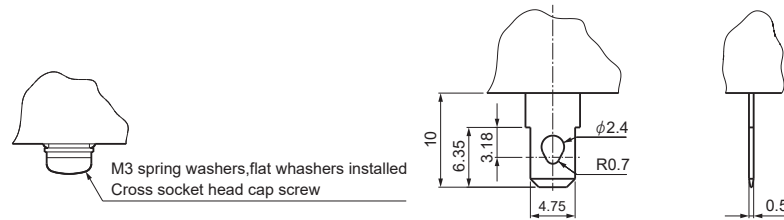
Screw Terminal



#187 Tab • Soldering Terminal

Pin No.	Full-Face	Dual-Color	Lighting
L1	Anode (+)	Anode (+)	Anode (+)
L2	Cathode (-)	Cathode (-)	Cathode (-)
L3		Cathode (-)	

TERMINAL SHAPE



Screw Terminal

#187 Tab • Soldering Terminal

MOUNTING DESIGN / PANEL CUTOUT

Mounting design	Panel cutout
<p>Square Flat Square Dome</p>	<p style="text-align: center;">Recommended panel thickness : 1 to 6 mm</p> <p style="text-align: center;">To group mounting, please set apart from each other by at least 50 mm from the panel cut center line for heat radiation.</p> <p style="text-align: right;">n : Number of Units (Horizontal) m : Number of Units (Vertical)</p>
<p>Round Flat Round Dome</p>	

- ※ If the panel is to be finished (e.g. coated), make sure that the panel meets the specified dimensions after the coating.
- ※ After the panel-cutting process, make sure to remove burrs on the surface.

Tolerance : ± 0.4 mm

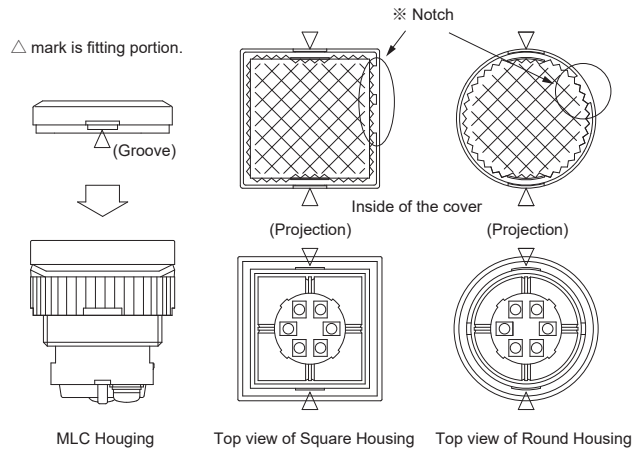
ASSEMBLY & DISASSEMBLY

1. Fitting Cover

Diamond-cut cover \triangle (groove and projection)

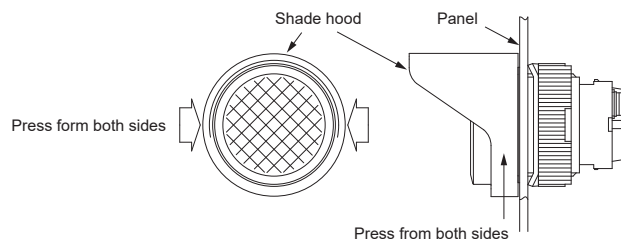
※ The notch on the cover is a result of manufacturing, It is not related to the fitting with the Housing.

Align the groove on the cover and projection on the light cartridge, and fit the cover until click.



2. Installing the shade food (Round)

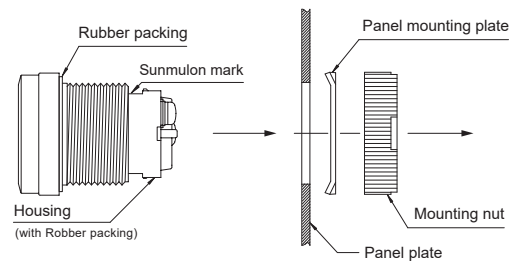
Tightening the mounting screws will cause the Housing to turn with it, so please secure the sides of the shade food with your fingers.



3. Mounting on panel

Remove the panel mounting plate and mounting nut from the Housing. Attach the Housing to the panel and attach the panel mounting plate from the back of the panel.

Tighten the mounting nut using the tightening tool (ML-0610).



PRECAUTIONS FOR CORRECT USE

1. MLC is based on ML. Please note the following.
ML covers and filters can be installed for MLC, but they cannot be ordered in assembled unit and must be purchased separately.
AC/DC 100V unit for ML cannot be used for MLC.
MLC can only be ordered in assembled unit. The light cartridge and housing cannot be ordered separately.
2. When using the product outdoors, please use it within the IP65 standard and the specifications specified by us.
Installed the panel without any bumps, debris, or burrs on the panel surface, and with no kinks or bends in the packing.
The tightening torque of the mounting nut when attaching to the panel should be 0.98 to 1.47 N·m or less for Oil and water-tight type and 1.47 N·m or less for No protection type.
3. Brightness is expressed in terms of illuminance, but TYP.7000cd/m²(reference value) is measured at the highest luminance on the area of about 4 squares of diamond-cut cover surface.
The brightness of lighting type is measured in a dark room at a distance of 50 cm directly below. Approx. 70 lux (reference illuminance)

※ For handling instructions and precautions other than the above, please refer to "Safety Precautions for All Indicators".

Tolerance : ± 0.4 mm

As of April 2023

Safety Precautions for All Indicators

1. Notes on contents of Catalogs

- (1) Rated values, performance values, and specification values of Sunmulon products listed in this catalog are values acquired under respective conditions in independent testing, and do not guarantee values gained in combined conditions.
- (2) The ambient operating temperature(humidity) is guaranteed by evaluation based on characteristics, and does not guarantee continuous use for a long period of time near the upper or lower limit of the ambient operating temperature(humidity) or permanent use at that temperature(humidity).
- (3) Reference data and reference values listed in catalogs are for reference purposes only, and do not guarantee that the product will always operate appropriately in that range.
- (4) The specifications / appearance and accessories of Sunmulon products listed in catalogs are subject to change or termination of sales without notice, for improvement or other reasons.
- (5) The content of catalogs is subject to change without notice.

2. Note on applications

- (1) If using Sunmulon products in combination with other products, confirm the following suitability by yourself. Sunmulon shall provide no guarantees regarding the combination suitability.
 - (a) Regulations, standards, or laws to which your machinery, equipment, etc. must conform
 - (b) Functionality and safety of your machinery and equipment
- (2) Wiring and installation that ensures the Sunmulon product used in your system, machine, device, or the like can perform and function according to its specifications.
- (3) When using Sunmulon products, be cautious when implementing the following.
 - (a) Use of Sunmulon products with sufficient allowance for rating and performance.
 - (b) Safety design, including redundant design and malfunction prevention design that prevents other danger and damage even in the event that Sunmulon product fails.
- (4) Sunmulon products are designed and manufactured as general-purpose products for general industrial products. They are not intended for use in the following applications, and in the event that you use Sunmulon product for these applications, unless otherwise agreed upon between you and Sunmulon, Sunmulon shall provide no guarantees whatsoever regarding Sunmulon products.
 - (a) Safety devices intended for human body protection
 - (b) Direct control of transport equipment (railroads / airplanes / ships / vehicles / vehicle instruments, etc.)
 - (c) Space equipment, submarine equipment
 - (d) Nuclear power control equipment, radiation related equipment
 - (e) Combustion equipment, electric heat equipment
 - (f) Disaster prevention and security equipment
 - (g) Elevating equipment
 - (h) Amusement facilities
 - (i) Facilities subject to government or industry regulations
 - (j) Use in applications that require a high degree of safety, any other equipment, instruments, or the like that could endanger life or human health

3. Warranty

- (1) The warranty period for Sunmulon products shall be 1 year after purchase or delivery to the specified location.
- (2) Warranty scope should a failure occur in Sunmulon product during the above warranty period for reasons attributable to Sunmulon, then Sunmulon shall provide that product, free of charge, the same quantity. Further, in no event shall liability of Sunmulon exceed the individual price of the product on which liability is asserted.
- (3) Failures caused by the following reasons shall be deemed outside the scope of this warranty.
 - (a) The product was handled or used deviating from conditions / environment listed in the catalogs
 - (b) The failure was caused by reasons other than Sunmulon product
 - (c) Modification or repair was performed by a party other than Sunmulon
 - (d) Replacement of maintenance parts, installation of accessories, or the like was not performed properly in accordance with the user's manual and catalogs
 - (e) The failure could not have been predicted with the scientific and technical standards at the time when the product was shipped from Sunmulon
 - (f) The failure was due to other causes not attributable to Sunmulon (including cases of force majeure such as natural disasters and other disasters)
- (4) The warranty listed in this Safety Precautions is the full and complete warranty for Sunmulon products, and Sunmulon shall bear no liability whatsoever regarding special damages, indirect damages, incidental damages, or passive damages that occurred due to Sunmulon product.

4. Handling precautions for indicator

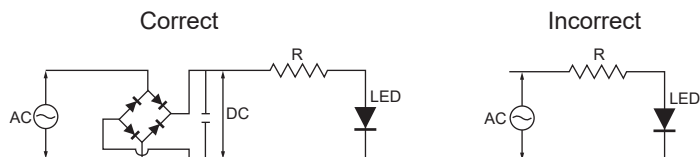
- (1) Wire the terminals with correct polarity. Connecting connectors backwards may cause a power short, resulting in burnout.
- (2) Turn off the power to the product before starting installation, removal, wiring, maintenance, or inspection. Failure to turn power off may cause electrical shock or fire.
- (3) Be careful of electrostatic breakdown when handling.
- (4) Do not drop or otherwise apply strong force to the indicator.
- (5) Do not place heavy objects on the indicator.
- (6) Do not operate or use the housing by itself. Use the indicator with assembled the cover.
- (7) When removing the cover and filter, using a sharp object (screwdrivers, tweezers, etc.), hard object (metal, etc.), or with a large or sudden force, may cause deform or damage the indicator.
- (8) Do not use the indicator under loads that exceed the rated capacity or other ratings. Doing so may result in burnout accidents.

Safety Precautions for All Indicators

- (9) Assemble correctly according to the handling instructions. Do not assemble or disassemble the product other than as described in the catalog, as this may cause defects or accidents.

(10) Illumination

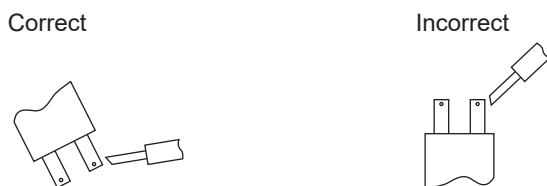
- (a) Do not apply a voltage between the LED terminal that is greater than the rated voltage. Doing so may damage the LED, cause lighting failure.
(b) LEDs cannot be lit directly by AC circuit should be provided rectifier smoothing circuit for products other than AC input type.



- (c) When wiring, pay attention to the polarity of the terminals.
(d) Simultaneous lighting may not be possible with Dual-Color, 3-Color illumination or Split-Face illumination, check the catalog.
(e) Apply voltage directly to LEDs of Non-built-in resistor type will damage the LEDs, so connect an appropriate external resistor.

(11) Wiring

- (a) When tightening terminals or connecting connectors, do not apply more force than necessary from the back side. Support the indicator with one hand as it may slip out of the front of the panel.
(b) Use the applicable connectors listed in the catalog for each model.
(c) Do not apply a soldering iron to the indicator housing. Doing so may deform the terminals and cause defects.
(d) Hand solder with the terminals facing down to prevent flux from penetrating into the indicator.



- (e) Use the appropriate wire size for the applied voltage and current, and solder properly. Use of the product with incomplete soldering may cause abnormal heat generation, resulting in a fire hazard.

(12) Usage environment

- (a) Do not use in the presence of flammable or explosive gases such as gasoline, thinner, LPG, etc.
(b) Avoid using the product in places where corrosive or silicon gas is generated, high temperature, high humidity, sea breeze or direct sunlight.
(c) Provide appropriate protection when using the product in places where it is exposed to water, oil, metal powder, or dust.
(d) Do not use the product in a place subject to vibration or shock. It may cause malfunction or damage.
(e) When installed in a close grouping or continuously lit, the ambient temperature may exceed the specified value due to heat generation. Take measures such as ventilation and lowering the operating voltage.
(f) When checking the actual equipment, load conditions and operating environment should be the same as the actual operating conditions.
(g) The ambient temperature for storage is -25°C to 65°C (No freeze, no condensation).

- (13) When wiping off dirt on the indicator, wipe lightly with a soft, dry cloth. Organic solvents such as thinner, benzene, alcohol, or other acidic chemicals may cause deformation, discoloration, or malfunction.

- (14) Store the product away from malignant gases, dust, high temperature and high humidity, and keep it in our packing condition.

(15) Periodic inspection and replacement

- (a) Although mechanical and electrical durability are listed in the specifications column, deterioration of various parts (deterioration of resins and corrosion of metal parts) is possible due to the operating environment and method of use. We ask that you implement inspections for Sunmulon products to prevent accidents from occurring by conducting periodic inspections and replacements.

(16) Service scope

- The price of Sunmulon products do not include the cost of services, such as dispatching technicians.