

15GL

RoHS Compliant

Illuminated Pushbutton Switches



■ Specification

Rating	Non-switching : 1mA, DC20V Max.or 5mA,DC5V Max. Break current : Same as Non-switching Min. rating : 1mA, DC5V
Contact Resistance	200Ω Max.
Dielectric Strength	100MΩ Min. (DC100V)
Insulation Resistance	AC250Vrms 1minute
Operating Force	1.18~1.96N
Stroke	1.6±0.3mm
Operating Temperature Range	-10°C~+60°C
Storage Temperature Range	-25°C~+70°C
Electrical Life	500,000 operations
Material/Finish	Clear cover,Key top:Polycarbonate Housing,Case:GF-PBT Contact terminals:Phosphor bronze/Gold over Nickel plating LED terminal:Phosphor bronze/Gold over Nickel plating

■ Part Numbering

15GL - 18 0 - 0 010 - E

Series Code		Key Top Style		Transparent Cover		Key top / LED Color						Pb Free	
		Code	Style	Code	cover	Code	Color	Color	Code	Color	Color		
		14	14mm sq.	0	With cover	000	White	Yellow	080	White	Green		
		18	18mm sq.	1	Without cover	010	Red	Red	160	White	Red		
						030	Green	Green	001	White	Red·Green		

■ Type and LED Specification

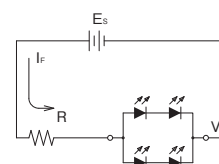
Part No.	Color		LED Characteristics					
	Key Top	LED	Max. Rating (25°C)		順電圧 (V _F) Forward Voltage (V _F)		Recommended Forward Current	Across Terminals
			Reverse Voltage (V _R)	Forward Current (I _F)	Standard	Max		
15GL-***-0000-X	White	Yellow	10V	50mA	4.2V	5.2V	40mA	5-6
15GL-***-0010-X	Red	Red			4.0V			
15GL-***-0030-X	Green	Green			4.4V			
15GL-***-0080-X	White	Green			4.4V			
15GL-***-0160-X	White	Red		30mA	3.6V		20mA	6-8
15GL-***-0001-X	White	Green		40mA	4.4V		40mA	5-7

(Note 1) *** designate Key Top Style and With/Without Transparent Cover.
"14" = 14mm sq.
"18" = 18mm sq.
"0" = With cover
"1" = Without cover

LED Characteristics		
Ambient Temperature and Allowable Forward Current		
Single Color LED	Dual Color LED: Red	Dual Color LED: Green
<p>LED Reduction Rate 0.73mA/K</p>	<p>LED Reduction Rate 0.45mA/K</p>	<p>LED Reduction Rate 0.55mA/K</p>

■ Precautions

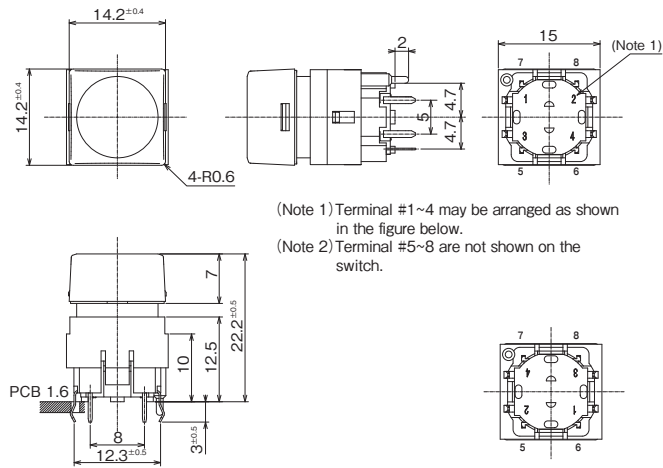
- To prevent overcurrent of LED, connect a protective resistance (R) in series.
 - For the values of V_F, etc., refer to the table shown above.
- (c)R: Protective resistance ES: Supply voltage
V_F: Forward voltage of LED I_F: Forward current of LED



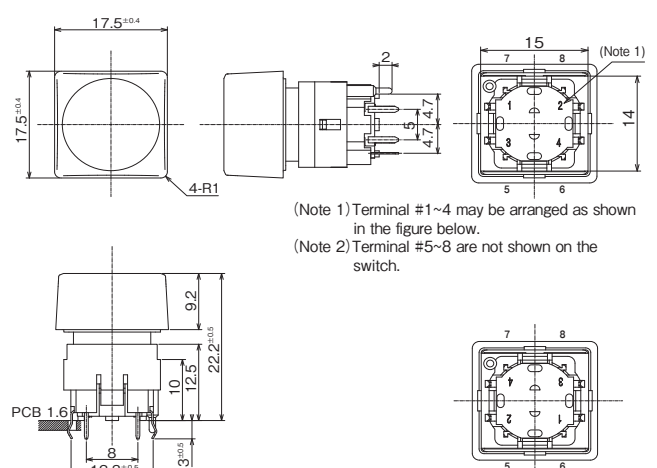
$$R = \frac{E_s - V_F}{I_F}$$

15GL

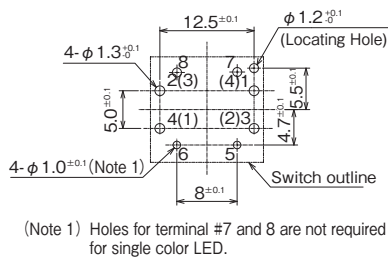
15GL-14* 14 mm Sq. Type



15GL-18* 18 mm Sq. Type

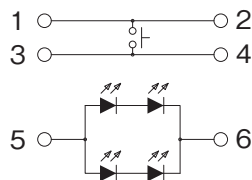


PC Hole Layouts

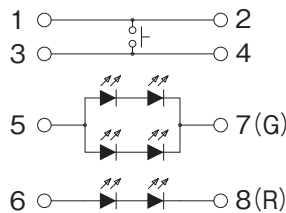


Circuit

Single Color LED



Dual Color LED



Legend sheet should be cut as shown below.
(t=0.2mm max)

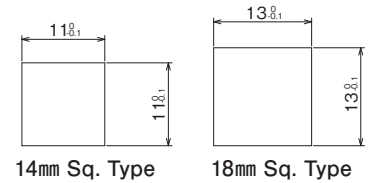
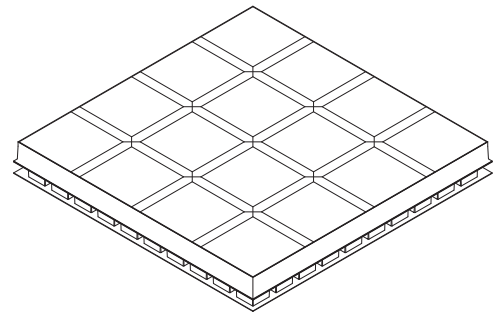


Table of Part Numbers

Part No.	Key Top Style	Key Top Color	LED Color	Transparent Cover	MOQ	
15GL-140-0000-E	14mm sq.	White	Yellow	With cover	100	
15GL-140-0010-E		Red	Red			
15GL-140-0030-E		Green	Green			
15GL-140-0080-E		White	Green			
15GL-140-0160-E		White	Red			
15GL-140-0001-E		White	Red/Green			
15GL-141-0000-E		14mm sq.	White	Yellow		Without cover
15GL-141-0010-E			Red	Red		
15GL-141-0030-E			Green	v		
15GL-141-0080-E			White	Green		
15GL-141-0160-E			White	Red		
15GL-141-0001-E			White	Red/Green		
15GL-180-0000-E	18mm sq.	White	Yellow	With cover		
15GL-180-0010-E		Red	Red			
15GL-180-0030-E		Green	Green			
15GL-180-0080-E		White	Green			
15GL-180-0160-E		White	Red			
15GL-180-0001-E		White	Red/Green			
15GL-181-0000-E		18mm sq.	White	Yellow		Without cover
15GL-181-0010-E			Red	Red		
15GL-181-0030-E			Green	Green		
15GL-181-0080-E			White	Green		
15GL-181-0160-E			White	Green		
15GL-181-0001-E			White	Red/Green		

Packaging Specifications

100pcs./tray



Soldering

- Manual soldering
Device : Solder iron
350°C Max. 3sec. Max.
- Auto soldering
Device : Jet wave or dip type
260°C Max. 10sec. Max. Twice