

Outline of the Series

This is a compact snap-in rocker switch rated up to 10A, also available in LED spot illumination and dustproof types.

Features of the Series

1. Snap-in mounting allows for quick and easy installation.
2. Space-saving design with a minimum panel cutout size of 19.2 × 12.9 mm for single-pole models.
3. LED spot illumination type is available.
4. A dust-tight version is offered to prevent malfunction caused by foreign particles in factory or industrial environments.



Common Specifications

■ Ratings

Symbol Voltage	51, 53, 54	04	14	Load	Note
AC125V AC250V	10A	6A	3A	Resistive Load	Load only with Resistive, Power Factor=1

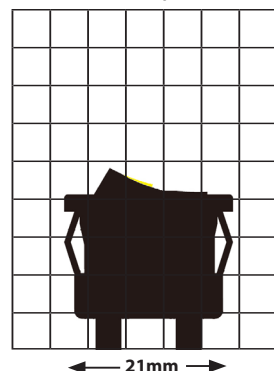
* A resistive load refers to a load consisting solely of resistance. In actual circuits, however, there may be inductive, capacitive, or motor loads, each of which can generate inrush current. Therefore, when selecting a switch, be sure to choose a rating with sufficient margin above the steady-state current.

For more details, please refer to "Useful Advices and Precautions on Usage of Operational Switches."

Packaging Quantity

VLA04 • 14 VLD04 • 14 VLK51 • 53	400 pcs
Others	200 pcs

Silhouette (VLK51)



Contact Resistance	20 mΩ Max. (DC2V 1A) (Initial value)
Withstanding Voltage	AC1,500V 1 Minute
Insulating Resistance	1,000MΩ Min. (DC500V)
Electrical Life	10,000 times
Operating Temperature Range	-20°C ~ +70°C
Storage Temperature Range	-20°C ~ +70°C
Hand-soldering Conditions	350 ± 3°C within 3 sec.

* For products other than those listed above or for custom items, please contact us.

Product Designations

Standard Type

Series Name	Operational-part Type	Switch Functions	Current Capacity	Type of Terminals	Details of Terminal Operational-part Indication
V	L	A	0	4	-61

Operational-part	Symbol
Rocker	L

Switch Functions			Symbol	
Left-push	Center	Right-push	SP	DP
ON	-	OFF	A	K
ON	-	ON	D	

Type of Terminals	Symbol
Solder Lug	1
PCB Terminal	3
Quick Connect #187	4

* SP is for Quick Connect #187 only.

Current Capacity	Symbol
6A 125/250V AC	0
3A 125/250V AC	1
10A 125/250V AC	5

* DP is with 10A only, SP is with 6A/3A only.

Details of terminal	Indication	Symbol
Solder Lug	Side ○	-
Solder Lug	White Dot	-60
Solder Lug	Upper ○	-62
PCB Terminal (Right-angle)	Side ○	-
PCB Terminal (Right-angle)	White Dot	-60
PCB Terminal (Right-angle)	Upper ○	-62
PCB Terminal (Left-angle)	Side ○	-18
PCB Terminal (Left-angle)	White Dot	-19
PCB Terminal (Left-angle)	Upper ○	-67
PCB Terminal (Straight)	Side ○	-17
PCB Terminal (Straight)	White Dot	-97
PCB Terminal (Straight)	Upper ○	-68
Quick Connect #187 (SP)	White Dot	-60
Quick Connect #187 (SP)	Side ○	-61
Quick Connect #187 (SP)	Upper ○	-62
Quick Connect #187 (DP)	Upper ○	-46
Quick Connect #187 (DP)	No indication	-48

* SP is for -60, -61, -62 of Quick Connect #187 only.

Dust-tight Type

Series Name	Operational-part Type	Switch Functions	Current Capacity	Type of Terminals	Operational-part Indication	Color of Operational-part
V	L	A	0	4	A	1

Operational-part	Symbol
Rocker	L

Current Capacity	Symbol
6A 125/250V AC	0

Switch Functions			Symbol
Left-push	Center	Right-push	SP
ON	-	OFF	A

Type of Terminals	Symbol
Quick Connect Terminal#187	4

Operational-part Indication	Symbol
Side ○	A
White Dot	B
Upper ○	C
No Indication	D

Color	Symbol
Black	1
Red	2

* The symbol of operational-part color is not displayed on the body.

* For Symbol A, the current ON/OFF status is indicated on the side of the actuator.
For Symbols B, C, the marking indicates the ON/OFF status that will result when that side is pressed. ("I" or "—" indicates ON, and "○" indicates OFF.)

Illuminated Type

Series Name	Operational-part Type	Switch Functions	Current Capacity	Type of Terminals	Illumination Type	Color of Operational-part or of LED
V	L	A	0	4	L	1

Operational-part	Symbol
Rocker	L

Current Capacity	Symbol
6A 125/250V AC	0

Switch Functions			Symbol
Left-push	Center	Right-push	SP
ON	-	OFF	A

Type of Terminals	Symbol
Quick Connect Terminal#187	4

Illumination Type	Symbol
LED	L

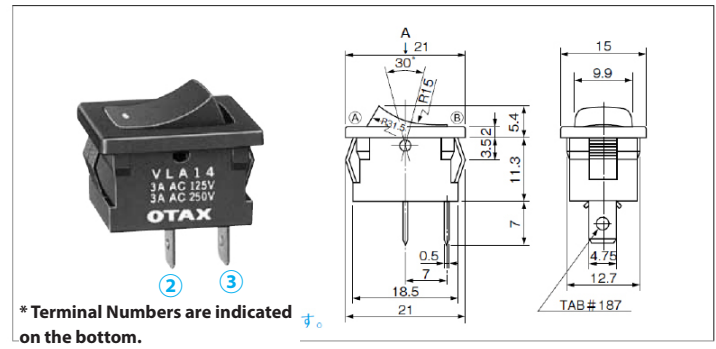
LED Color	Symbol
Amber	1
Red	2
Green	3

* For products other than those listed above or for custom items, please contact us.

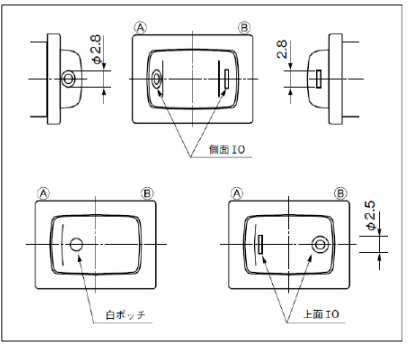
Switch Names, Functions, Dimensions

Standard Snap-in

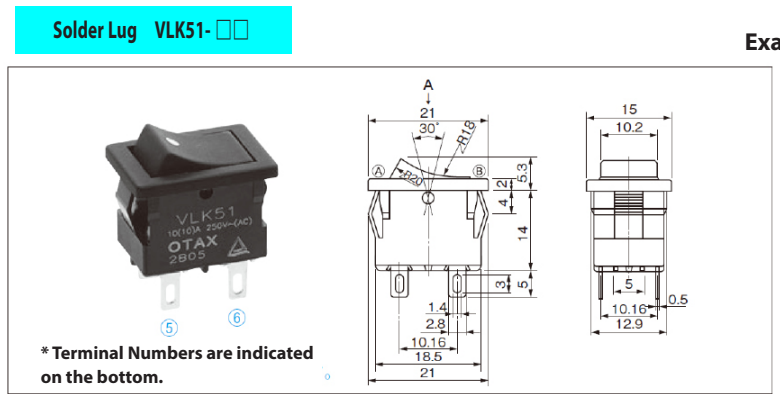
Product Name	Resistive Load	Circuit	Functions		
	AC125/250V				
VLA04-□□	6A	SPST	ON 2-3	—	OFF
VLD04-□□	6A	SPDT	ON 2-3	—	ON 2-1
VLA14-□□	3A	SPST	ON 2-3	—	OFF
VLD14-□□	3A	SPDT	ON 2-3	—	ON 2-1



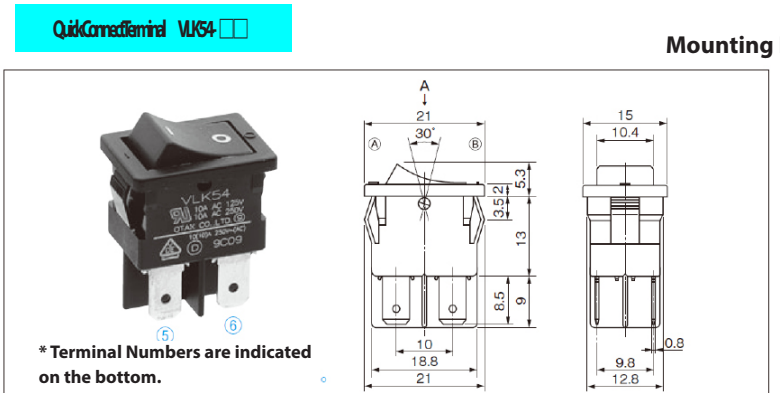
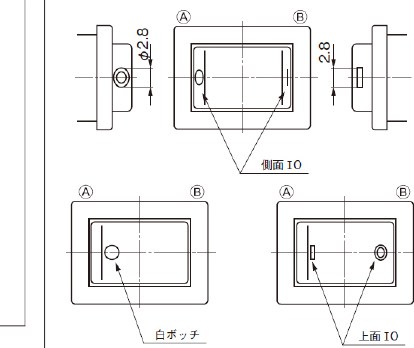
Examples of Operational-part Indication



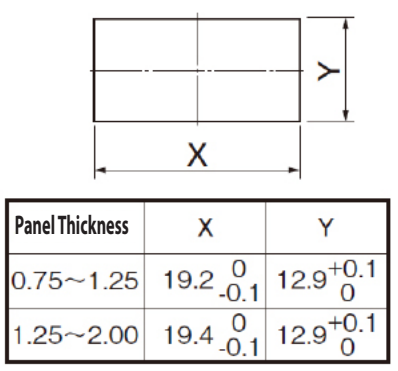
Product Name	Resistive Load	Circuit	Functions		
	AC125/250V				
VLK5 □-□□	10A	DPST	ON 2-3 5-6	—	OFF



Examples of Operational-part Indication



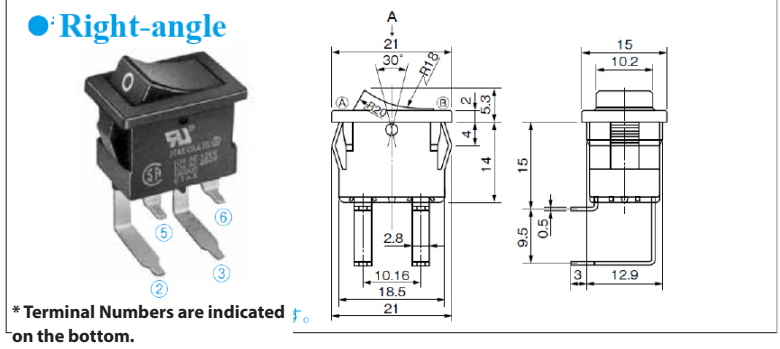
Mounting Hole Dimensions (All Types Common)



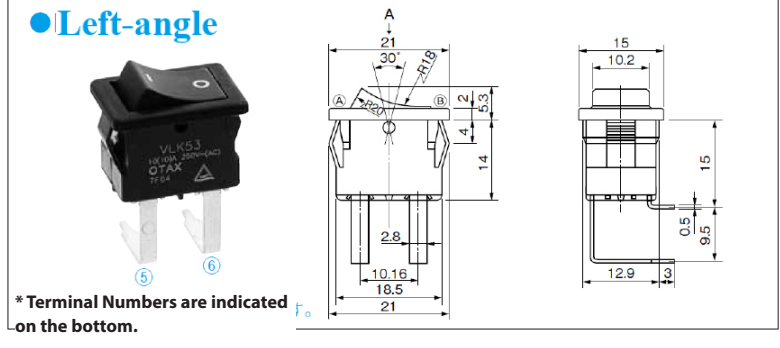
* For products other than those listed above or for custom items, please contact us.

PCB Terminal VLK53-□□

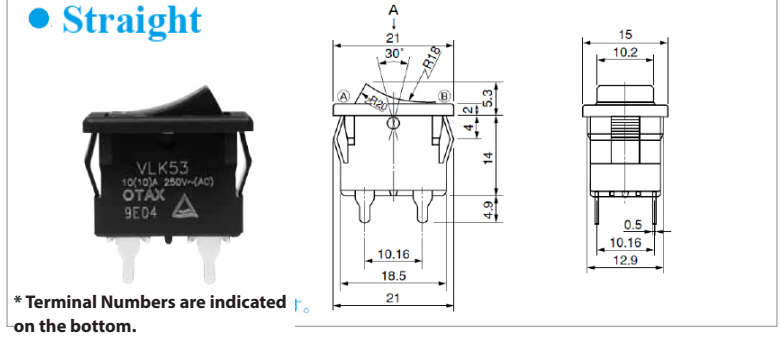
Right-angle



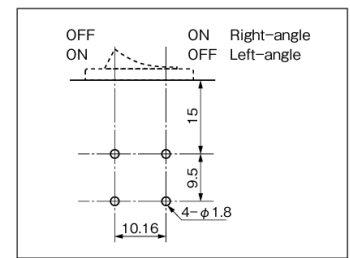
Left-angle



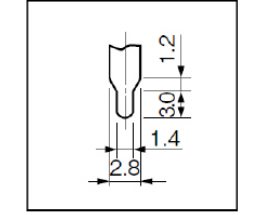
Straight



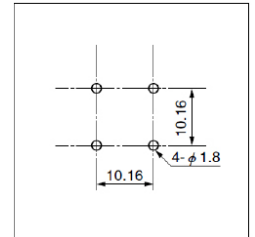
PCB Mounting Hole Dimensions (Right-/ Left-angle)



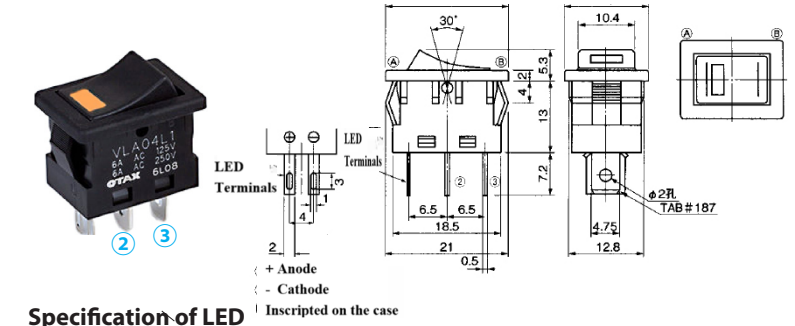
PCB Terminal Figure



PCB Mounting Hole Dimensions (Straight)



LED Illuminated VLA04L□



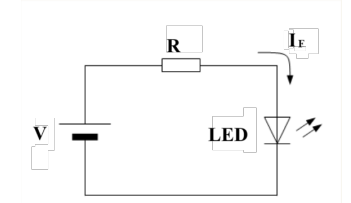
Specification of LED

Light Color	Acronym	Absolute Maximum Ratings			Recommended Electric Conditions	
		Power Dissipation	Forward Current	Reverse Voltage	Forward Voltage	Forward Current
	Unit	mW	mA	V	V (IF=20mA)	mA
Amber		125	50	4	2.10	20
Red		75	30	5	1.95	20
Green		75	30	5	2.10	20

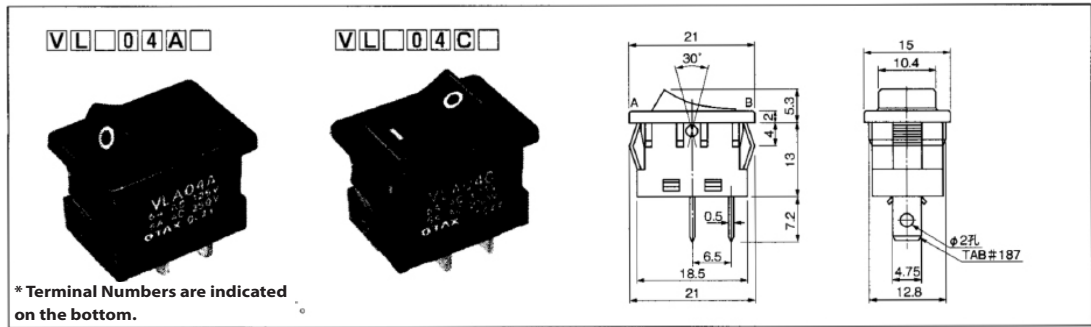
To achieve the desired forward current, please insert an appropriate ballast resistor or a constant current diode in series with the LED.

Formula for calculating the current-limiting resistor:
Resistor (Ω) = (Supply Voltage (V) - Recommended Forward Voltage (V)) / Recommended Forward Current (A)
For example, if the supply voltage is 5V, the recommended forward voltage is 2.1V, and the recommended forward current is 20mA, then: (5 - 2.1) / (20 / 1000) = 145Ω.

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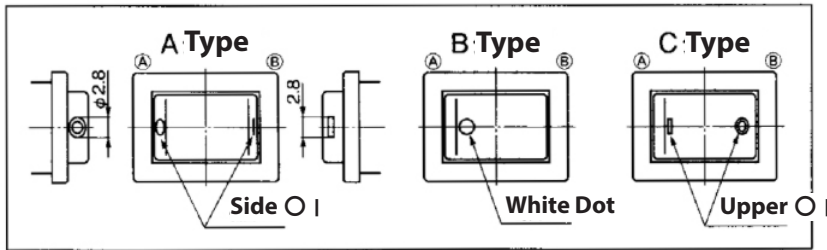


Dust-tight VLA04 □□

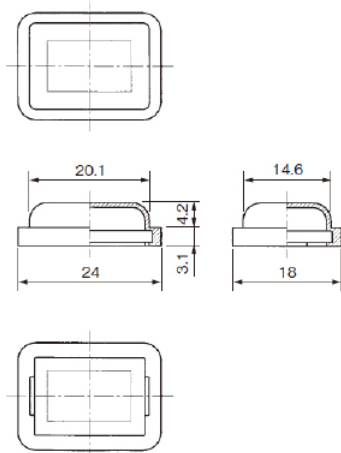


* Terminal Numbers are indicated on the bottom.

Examples of Operational-part indication



Splash-proof Cap



Materials	Color	Part Number
Silicone	Half-transparent	7847-B894

* For this accessory, please inquire us before the ordering.

Compliance with the European RoHS Directive

All DIP switches, control switches, connectors, and terminal blocks manufactured by OTAX with the following RoHS Directive:

Directive 2011/65/EU of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).

Our products do not contain any of the ten specified hazardous substances (except for exempted applications):

Lead (Pb) Mercury (Hg) Cadmium (Cd) Hexavalent chromium (Cr⁶⁺) Polybrominated biphenyls (PBB) Polybrominated diphenyl ethers (PBDE) Di(2-ethylhexyl) phthalate (DEHP) Butyl benzyl phthalate (BBP) Dibutyl phthalate (DBP) Diisobutyl phthalate (DIBP)

Cautions on Handling

1. Snap-in mounting should be performed only once.

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Switch Tips

Cautions on Capacitive Load

Many modern electronic devices use switching power supplies. Inside these power supplies, a large capacitor is typically placed immediately after the rectifier circuit, which presents a capacitive load—one of the most demanding types of loads from the perspective of a switch.

Similarly, the power supplies used in the increasingly popular LED lighting systems also often present a capacitive load.

For this reason, please pay close attention to inrush current during switch operation and select a switch with an appropriate current rating.

If large inrush currents are expected, we recommend using switching power supplies with built-in inrush current limiting circuits, or referring to the “Useful Advices and Precautions on Usage of Operational Switches” for various methods of limiting inrush current.

If switches are used under high inrush current conditions without any protective measures, there is a risk that the switch contacts may weld together, potentially leading to serious failure or accidents.

Capacitive Load	Since capacitors draw large currents when first energized, high-level inrush currents are generated.	10–1000 times the steady-state current in microseconds to milliseconds	Switching power supplies (capacitors in the primary power circuit), LED lighting	(Measure the actual inrush current and select an appropriately rated switch. Consider an inrush current reduction circuit.)
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