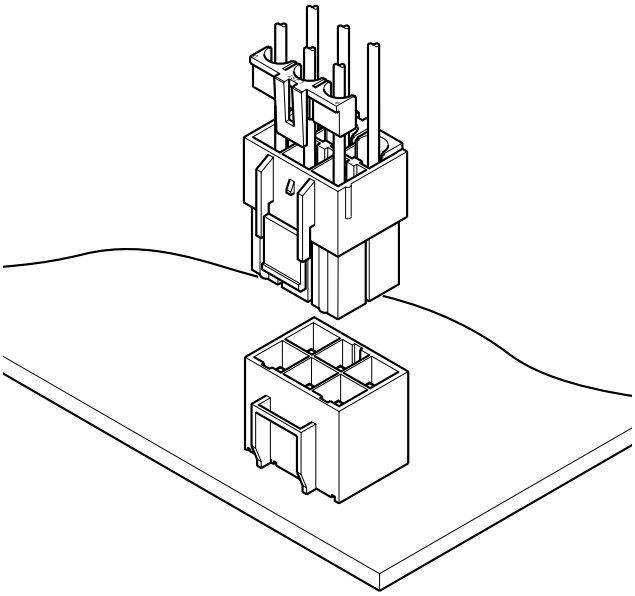


VL CONNECTOR

6.2mm pitch/Disconnectable Crimp style connectors
(Combined use for both wire-to-board and wire-to-wire connections)



This VL connector is 6.2 mm pitch wire-to-wire and wire-to-board connector, designed for large current. Secondary retainer, which prevents from insufficient insertion of contact and coming off contact, may use and large current circuit can be connected certainly and safety.

- ***Housing lances***
- ***Retainer***
- ***Suited for large current***
- ***Compatible for both wire-to-wire and wire-to-board connections***

Specifications

- Current rating: 20 A AC, DC (Refer to the following table.)
- Voltage rating: 600 V AC, DC
- Temperature range: -25˚C to +90˚C
  (including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 7 mΩ max.
  After environmental tests/ 10 mΩ max.
- Insulation resistance: 1,000 MΩ min.
- Withstanding voltage: 2,000 VAC/minute
- Applicable wire: AWG #22 to #12
- Applicable PC board thickness: 1.6 mm

* In using the products, refer to "Handling Precaution for Terminal and Connector" described on our website (Technical documents of Product information page).
* Contact JST for details.
* RoHS2 compliance

Note: The current rating differs depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

Current unit: A

No. of circuits	Wire size (AWG)					
	#12	#14	#16	#18	#20	#22
2	20	15	10	8	6	4
3	17	14	9	8	6	4
4	16	13	9	7	6	4
6	15	12	8	7	5	3
8	14	11	7	6	5	3
12	13	10	7	6	4	3

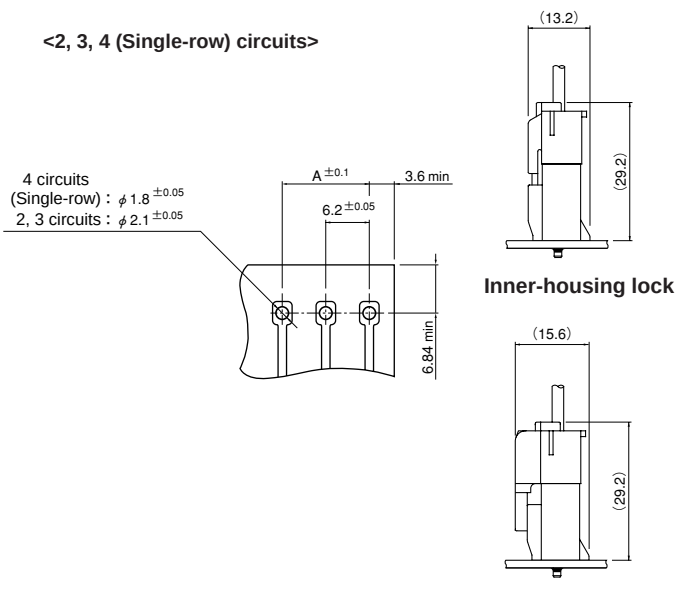
Note: Do not branch in parallel current which exceeds the rated current (e.g. more than 17A in the case of 3 circuits with AWG #12). If branched in parallel, current imbalance or other problems may develop. If it is absolutely necessary to branch such a large current in parallel, design the circuits without causing any imbalance and provide an extra margin for each circuit.

Standards

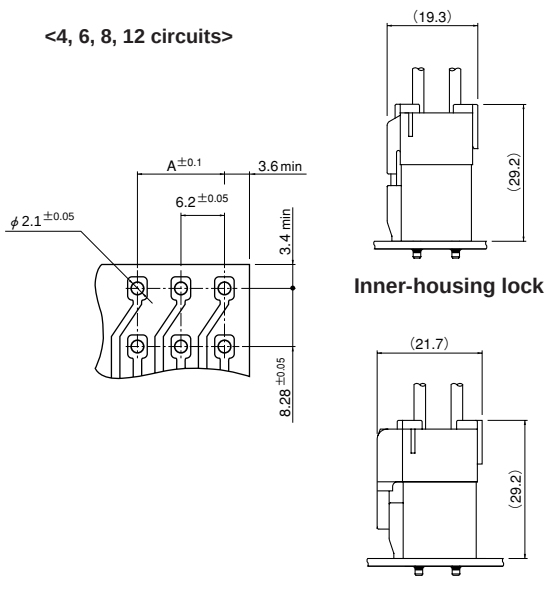
Recognized E60389
Certified LR20812
R9351103

PC board layout and Assembly layout

<2, 3, 4 (Single-row) circuits>

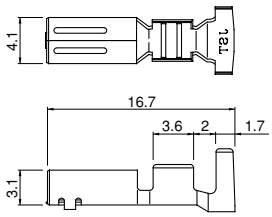


<4, 6, 8, 12 circuits>



Note: 1. The above figure is the figure viewed from soldering side.
2. Tolerances are non-cumulative: ±0.05 mm for all centers.
3. Hole dimensions differ according to the type of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty/ reel
	mm²	AWG #		
SVF-42T-P2.0	0.3～1.25	22～16	1.7～3.2	2,000
SVF-61T-P2.0	0.5～2.0	20～14	1.9～3.4	2,000
SVF-81T-P2.0	3.5	12	4.1	2,000

Material and Finish
Phosphor bronze, tin-plated (reflow treatment)

RoHS2 compliance

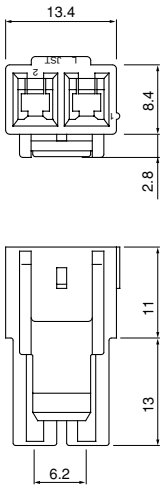
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SVF-42T-P2.0	AP-K2N	MKS-L	MK/SVF/M-42-20	APLMK SVF/M42-20
		—	—	—
SVF-61T-P2.0		MKS-L	MK/SVF/M-61-20	APLMK SVF/M61-20
		—	—	—

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SVF-81T-P2.0	AP-K2N	MKS-L	MK/SVF/M-81-20	APLMK SVF/M81-20
		—	—	—

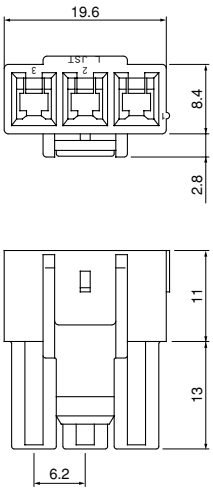
Note: Contact JST for fully automatic crimping applicator.

Housing (Inner-housing lock)

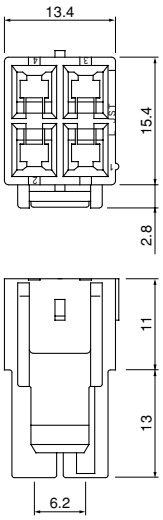
<2 circuits>



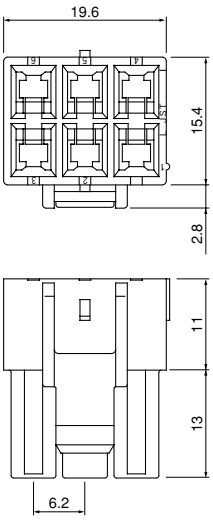
<3 circuits>



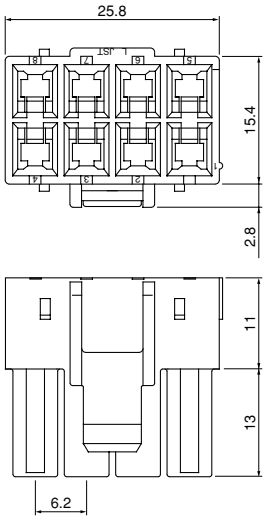
<4 circuits>



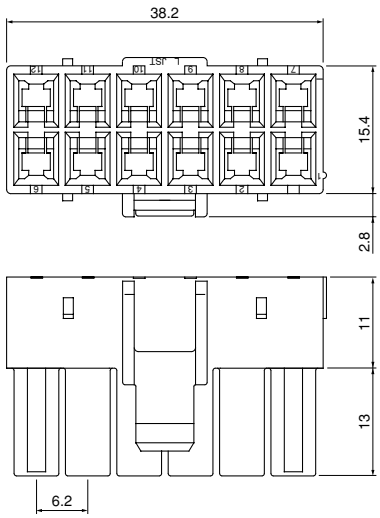
<6 circuits>



<8 circuits>



<12 circuits>



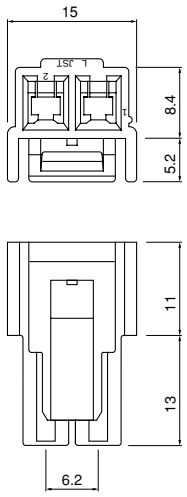
No. of circuits	Model No.	Q'ty/bag
2	**VLP-02V**	500
3	**VLP-03V**	500
4	**VLP-04V**	500
6	**VLP-06V**	500
8	**VLP-08V**	200
12	**VLP-12V**	100

Material
PA 66, UL94V-0, natural (white)

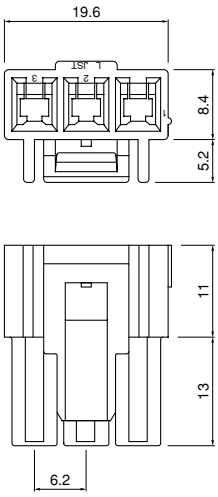
RoHS2 compliance
Note: Contact JST for Glow Wire compliant connectors.

Housing (Outer-housing lock)

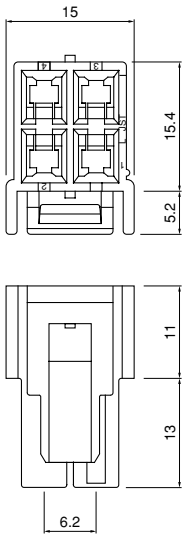
<2 circuits>



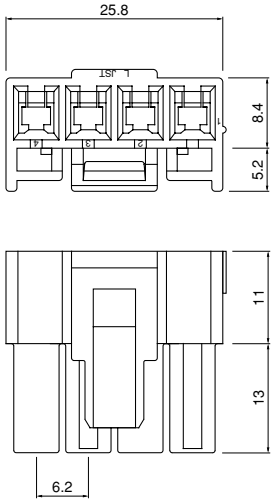
<3 circuits>



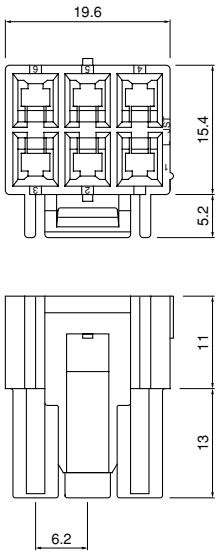
<4 circuits>



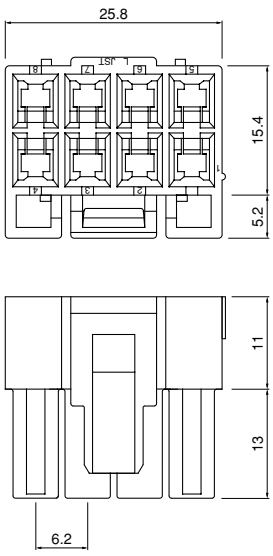
<4 circuits (Single-row)>



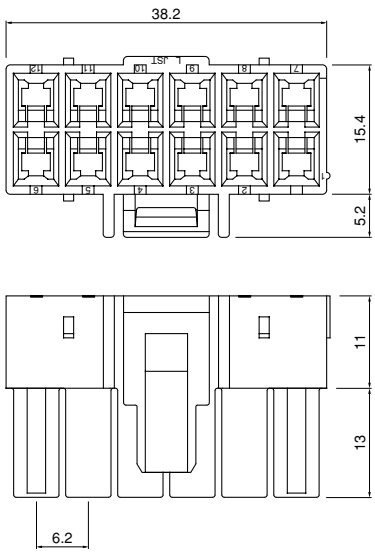
<6 circuits>



<8 circuits>



<12 circuits>



No. of circuits	Model No.	Q'ty/bag
2	**VLP-02V-1**	500
3	**VLP-03V-1**	500
4	**VLP-04V-1**	500
4 (Single-row)	**VLP-04VN-1**	500
6	**VLP-06V-1**	500
8	**VLP-08V-1**	500
12	**VLP-12V-1**	500

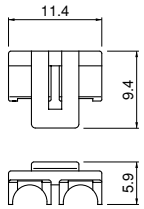
Material
PA 66, UL94V-0, natural (white)

RoHS 2compliance
Note: Contact JST for Glow Wire compliant connectors.

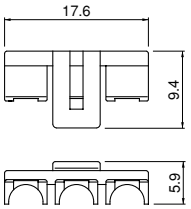
VL CONNECTOR

Retainer

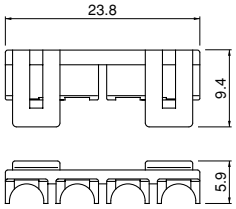
<2, 4 circuits>



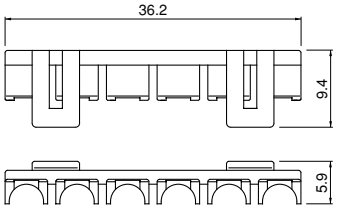
<3, 6 circuits>



<4 circuits (Single-row), 8 circuits>



<12 circuits>



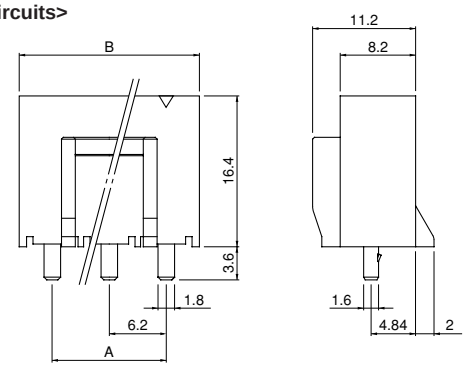
No. of circuits	Model No.	Q'ty/bag
2, 4	**VLS-02V**	1,000
3, 6	**VLS-03V**	1,000
4 (Single-row), 8	**VLS-08V**	1,000
12	**VLS-12V**	1,000

Material
Glass-filled PA 66, UL94V-0, natural (ivory)

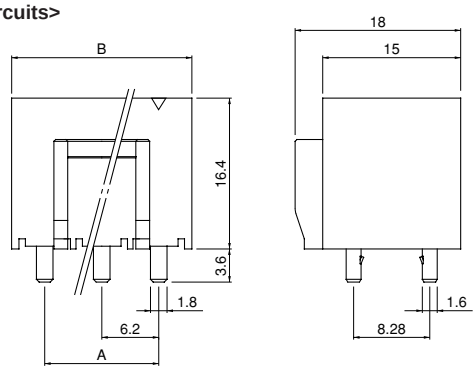
RoHS2 compliance

Header

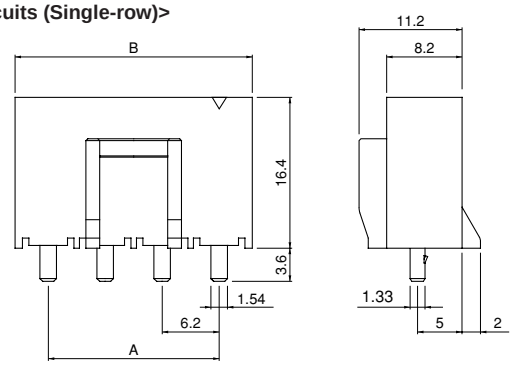
<2, 3 circuits>



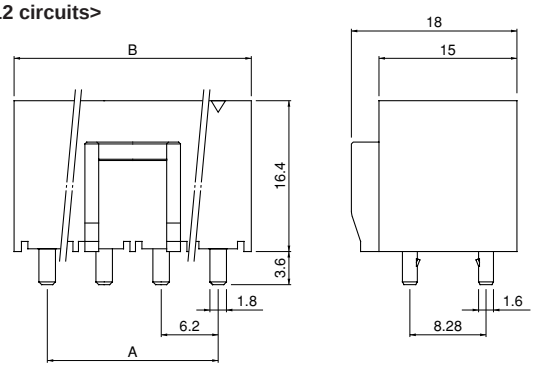
<4, 6 circuits>



<4 circuits (Single-row)>



<8, 12 circuits>



No. of circuits	Model No.	Dimensions (mm)		Q'ty/box
		A	B	
2	**B02P-VL**	6.2	13.4	100
3	**B03P-VL**	12.4	19.6	100
4	**B04P-VL**	6.2	13.4	100
4 (Single-row)	**B04P-VL-VN-1.8**	18.6	26.2	100
6	**B06P-VL**	12.4	19.6	50
8	**B08P-VL**	18.6	26.2	50
12	**B12P-VL**	31.0	38.6	35

Material and Finish
Post: Copper-alloy, tin-plated (reflow treatment) Wafer: PA 66, UL94V-0, natural (white)

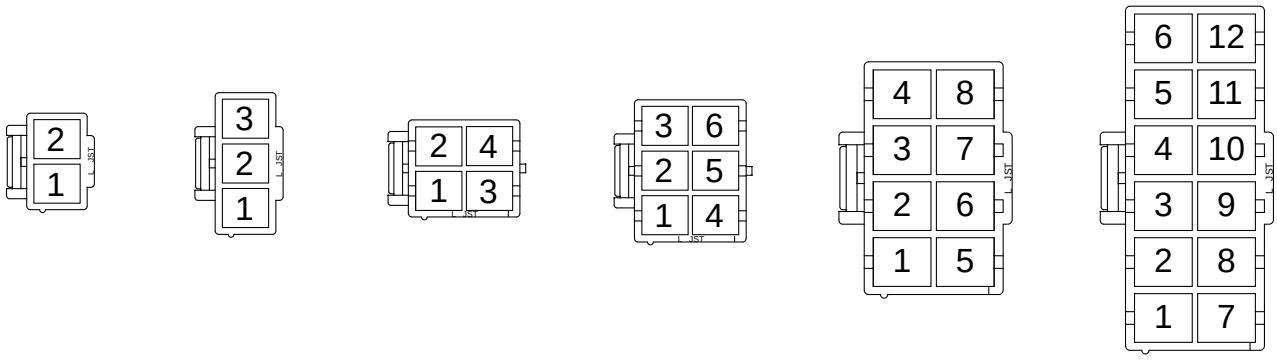
RoHS 2compliance

Note: Contact JST for Glow Wire compliant connectors.

Contact position location numbers

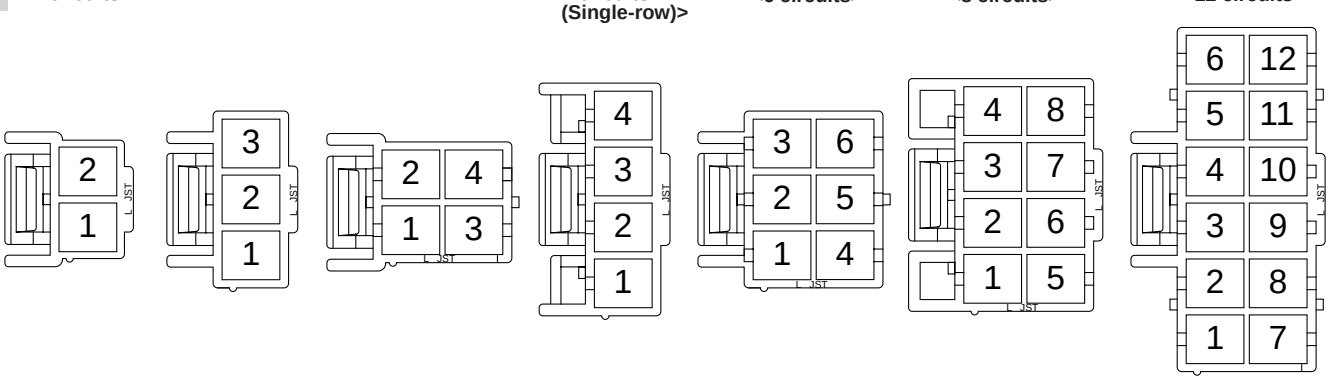
Inner-housing lock

<2 circuits> <3 circuits> <4 circuits> <6 circuits> <8 circuits> <12 circuits>



Outer-housing lock

<2 circuits> <3 circuits> <4 circuits> <4 circuits (Single-row)> <6 circuits> <8 circuits> <12 circuits>



Model number identification

Connector

S V F - 42 T - P 2.0

- Form: S --- Strip form, B --- Loose piece
- Series name
- Shape: F --- Socket contact
- Applicable wire: 42 --- AWG #22 to #16
  61 --- AWG #20 to #14
  81 --- AWG #12
- Surface finish: T --- Tin-plated (Reflow treatment)
- Material: P --- Phosphor bronze
- Terminal size

Housing

VL P - 02 V - 1

- Series name
- Part name: Plug
- No. of circuits: 2, 3, 4, 6, 8, 12
- Flammability: V --- UL94V-0
- Shape: None --- Inner lock
  1 --- Outer lock

Header

B 02P - VL

- Assembly style: B --- Top entry type
- No. of circuits: 2, 3, 4, 6, 8, 12
- Series name

Retainer

VL S - 02 V

- Series name
- Part name: Retainer
- No. of circuits: 2, 3, 4, 6, 8, 12
- Flammability: V --- UL94V-0

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

JST:

SM08B-NSHSS-TB(LF)(SN) VLS-03V 8P-SAN BM02B-NSHSS-TBT (LF)(SN) CZHR-14V-S PUDP-34V-S S02B-XASS-1 SMR-10V-N WC-491 PSIP-10V-LE 04P-SJN ELR-04V SMR-02V-B XADRP-18V XARP-05V BM24B-ZPDSS-TF (LF)(SN) RF-H102TD-1130 SM09B-ZESS-TB (LF)(SN) SMP-10V-NC SRC-51T-M4 XMR-02V XMS-03V 04JQ-BT BM02B-NSHSS-TBT PAP-16V-S S7B-PH-K-S(LF)(SN) SJ2M-01GF-M1.0N SJWPST-21T-M1.0N HLP-03V SFKR-02V-S