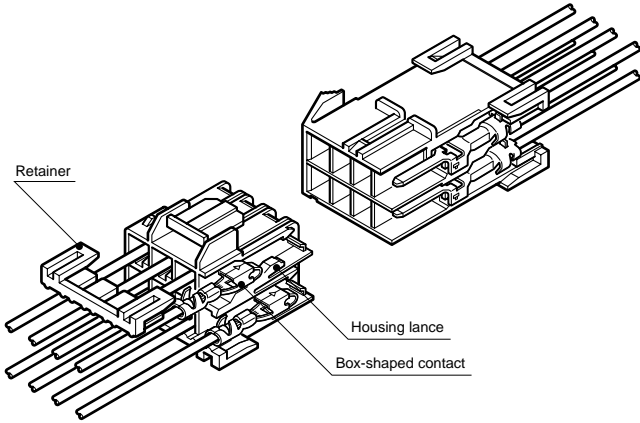


# ZL CONNECTOR

5.0mm pitch/Disconnectable Crimp style Wire-to-wire connectors



**ZL connectors are reliable, smoothly mating wire-to-wire connectors.**

- Housing lances
- Retainer
- Box-shaped contacts
- Mountable on a variety of panels

## Specifications

- Current rating: 10A AC, DC max.
- Voltage rating: 300V AC, DC max.
- Temperature range: -25°C to +90°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max.  
After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #16  
0.13 to 1.25mm<sup>2</sup>
- Applicable panel thickness: 0.7 to 2.4mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

Note: The current rating varies 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 wire size.

Current unit: A

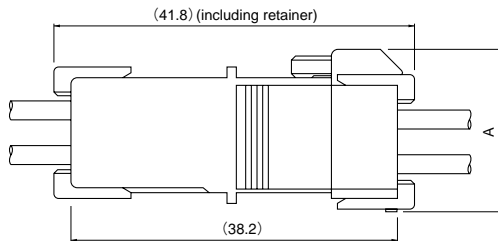
Circuits	Wire size (AWG)					
	#16	#18	#20	#22	#24	#26
2	10	6	5	4	3	2
4	9	5	4	3	3	2
6	8	4	3	3	2	2
8	6	4	3	3	2	2
12	6	4	3	3	2	2
16	5	3	2	2	1	1

## Standards

Ⓜ Recognized E60389

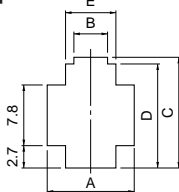
Ⓢ Certified LR20812

## Assembly layout and Panel layout

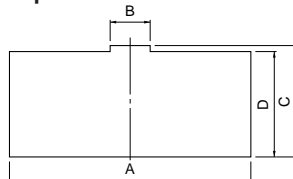


Circuits	Dimensions A (mm)
2 • 4	18.2
6 • 8 • 12 • 16	17.5

Shape I



Shape II



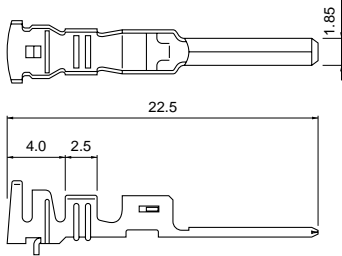
Circuits	Receptacle housing	Panel hole shape	Panel hole dimensions (mm) General tolerance ±0.13					Applicable panel thickness (mm)
			A	B	C	D	E	
2	ZLR-02V	I	11.5	4.4	13.95	13.2	6.5	0.7 ~ 2.4
4	ZLR-04V	I	16.5	5.2	13.95	13.2	11.6	
6	ZLR-06V	II	21.5	5.2	13.95	13.2	—	
8	ZLR-08V	II	26.5	5.2	13.95	13.2	—	
12	ZLR-12V	II	36.5	5.2	13.95	13.2	—	
16	ZLR-16V	II	46.5	5.2	13.95	13.2	—	

- Note: 1. Punch holes in the panel according to the sketch and table shown above. Burrs must be removed.  
2. The strength of the panel must be considered when punching two or more holes.  
3. The connector must be inserted from the same side as the hole is punched.

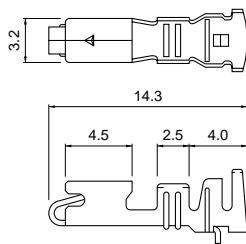
# ZL CONNECTOR

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty/reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>SZM-01T-P0.7</b>	<b>SZF-01T-P0.7</b>	0.13 ~ 0.5	26 ~ 20	1.3 ~ 2.7	3,000
<b>SZM-41T-P0.7</b>	<b>SZF-41T-P0.7</b>	0.75 ~ 1.25	18 ~ 16	1.9 ~ 3.1	
		0.3+0.3 ~ 0.5+0.5	22+22 ~ 20+20	1.7+1.7 ~ 2.0+2.0	

### Material and Finish

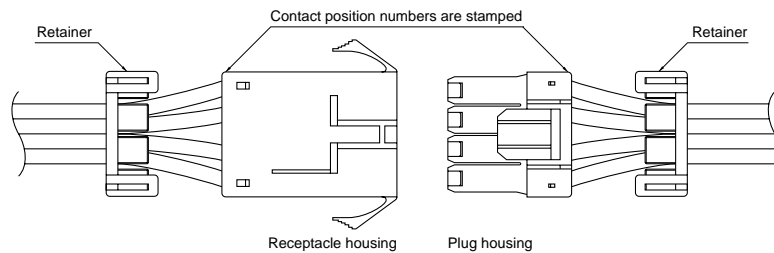
Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

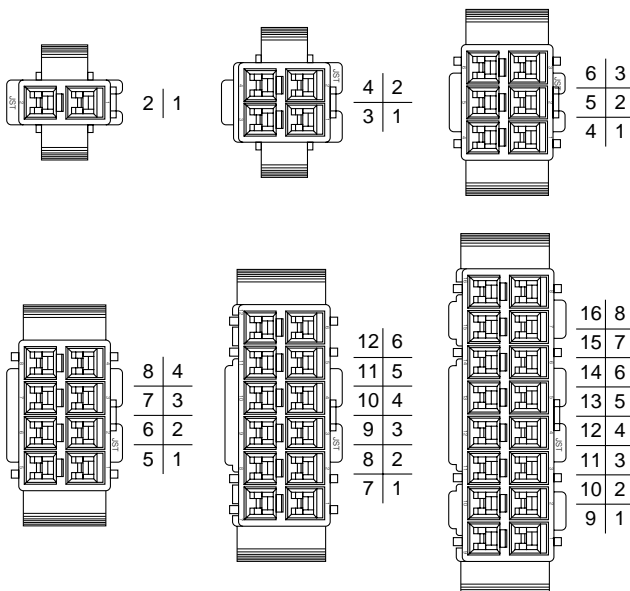
Note: 1. Contact JST for special products.  
2. Contact JST for brass products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SZM-01T-P0.7</b>	AP-K2N	MKS-L	MK/SZF/M-01-07	APLMK SZF/M01-07
<b>SZF-01T-P0.7</b>		—	—	—
<b>SZM-41T-P0.7</b>		MKS-L	MK/SZF/M-41-07	APLMK SZF/M41-07
<b>SZF-41T-P0.7</b>		—	—	—

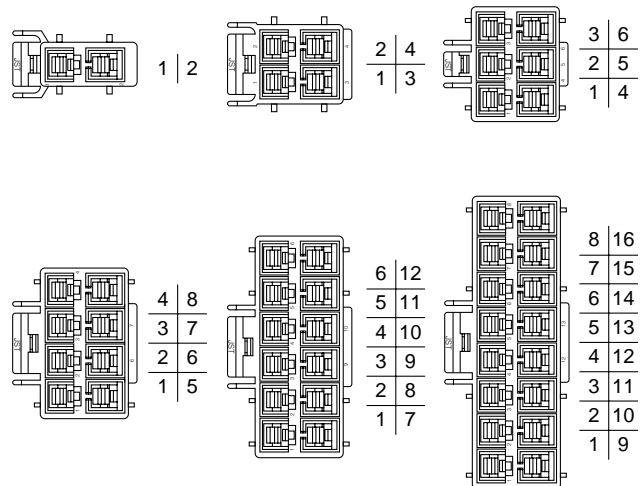
## Contact position location numbers



### Receptacle housing



### Plug housing



# ZL CONNECTOR

## Contact

Material: Housing...PA 6, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)		Retainer	
2	300V	10A	<b>ZLR-02V</b> 	Q'ty/ bag 500	<b>ZLP-02V</b> 	Q'ty/ bag 500	<b>ZLS-02V</b> (Used with both housings with 2 and 4 circuits) 	Q'ty/ bag 1,000
4	300V	9A	<b>ZLR-04V</b> 	Q'ty/ bag 500	<b>ZLP-04V</b> 	Q'ty/ bag 500	<b>ZLS-03V</b> 	Q'ty/ bag 1,000
6	300V	8A	<b>ZLR-06V</b> 	Q'ty/ bag 500	<b>ZLP-06V</b> 	Q'ty/ bag 500	<b>ZLS-03V</b> 	Q'ty/ bag 1,000
8	300V	6A	<b>ZLR-08V</b> 	Q'ty/ bag 500	<b>ZLP-08V</b> 	Q'ty/ bag 500	<b>ZLS-08V</b> 	Q'ty/ bag 1,000

RoHS compliance

# ZL CONNECTOR

## Contact

Material: Housing...PA 6, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)		Retainer	
12	300V	6A	<b>ZLR-12V</b> 	Q'ty/ bag 200	<b>ZLP-12V</b> 	Q'ty/ bag 200	<b>ZLS-12V</b> 	Q'ty/ bag 1,000
16	300V	5A	<b>ZLR-16V</b> 	Q'ty/ bag 200	<b>ZLP-16V</b> 	Q'ty/ bag 200	<b>ZLS-16V</b> 	Q'ty/ bag 1,000

### RoHS compliance

Note: 1. ZL connectors with any number of circuits can be used either panel mounted or free hanging. The panel hole dimensions are given on the next page.  
2. Contact JST for special products.