

**JST**

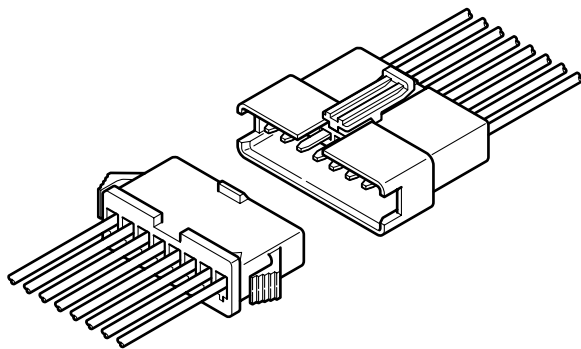
Crimp

**2.5mm**  
(.098") pitch

# SM CONNECTOR

*Disconnectable Crimp style wire-to-wire connectors*

**The SM series are 2.5mm (.098") pitch, wire-to-wire connectors that perform reliably in high-density, small current applications.**



## Features

- **High contact pressure**

With each insertion and withdrawal, the mating contacts wipe against each other to remove foreign matter. Moreover, the socket contacts tolerate a large variation in mating post thickness without a reduction in their normally high contact pressure. These factors insure an especially long service life. Moreover, the design of the housing and contacts allows the contacts to be easily inserted into the housing.

- **Highly reliable housing construction**

Since all the contacts are individually and totally surrounded by housing walls, the contacts are protected from deformation from outside sources of stress or from mismatching. The polarized housing shape prevents reverse connection.

- **Mountable on a variety of panels**

Due to our unique panel installation locking mechanisms, the housing can be easily installed on panels of various thicknesses without using tools.

- **Arm lock mechanism**

An arm lock mechanism securely holds the plug and the receptacle together when they are connected.

## Specifications

- Current rating: 3A AC, DC max.
  - Voltage rating: 250V AC, DC max.
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
  - Insulation resistance: 500M Ω min.
  - Withstanding voltage: 1,500V AC/minute
  - Applicable wire: AWG #28 to #22  
0.08 to 0.33mm<sup>2</sup>
  - Applicable panel thickness: 0.5 to 2.0mm(.020" to .079")
- \* Contact JST for details.

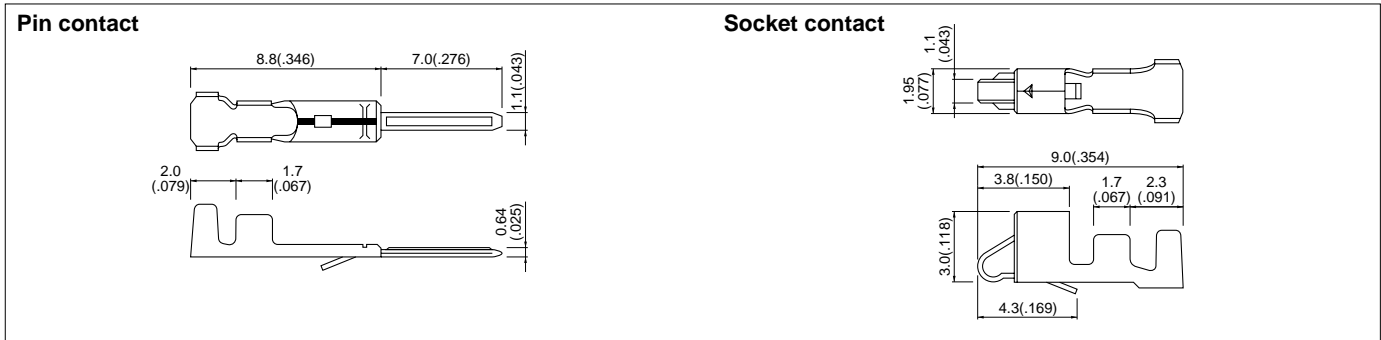
## Standards

- Recognized E60389
- 1 Certified LR20812
- 2 R75050

**JST 557**

# SM CONNECTOR

## Contact



Model No.		Applicable wire			Q'ty / reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #	Insulation O.D. mm(in.)	
<b>SYM-001T-P0.6</b>	<b>SHF-001T-0.8BS</b>	0.08 to 0.33	28 to 22	1.2 to 1.8(.047 to .071)	Pin contact: 8,500 Socket contact: 5,000

### Material and Finish

Phosphor bronze, tin-plated

Note: Contact JST for special products.

## Housing

Material: Nylon6, UL94V-0

Circuits	Current rating	Receptacle housing(for pin contact)		Q'ty / bag	Plug housing(for socket contact)		Q'ty / bag
		SMR-02V-B, black SMR-02V-N, natural (white)	SMR-03V-B, black SMR-03V-N, natural (white)		SMP-02V-BC, black SMP-02V-NC, natural (white)	SMP-03V-BC, black SMP-03V-NC, natural (white)	
2	3.0A			1,000			1,000
3	3.0A			1,000			1,000
4	3.0A			500			1,000

# SM CONNECTOR

## Housing

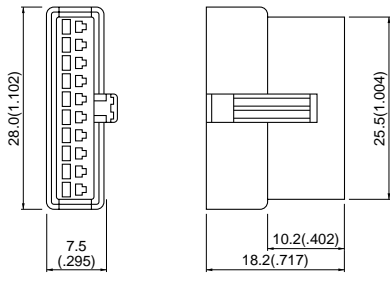
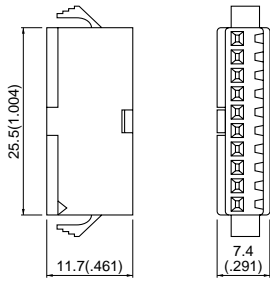
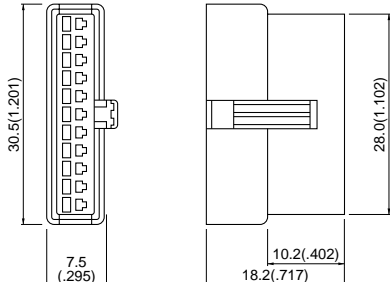
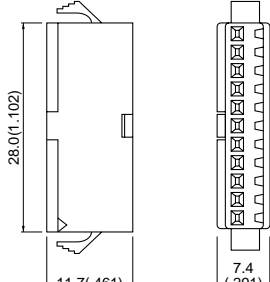
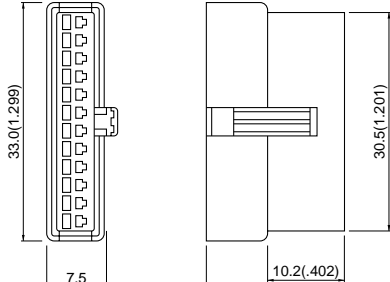
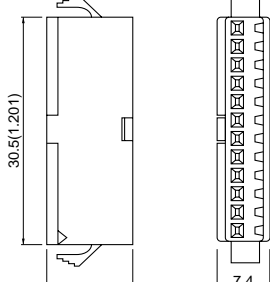
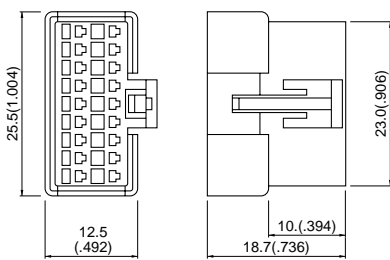
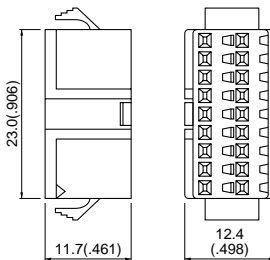
Material: Nylon6, UL94V-0

Circuits	Current rating	Receptacle housing(for pin contact)	Q'ty / bag	Plug housing(for socket contact)	Q'ty / bag
5	3.0A	<b>SMR-05V-B</b> , black <b>SMR-05V-N</b> , natural (white) 	500	<b>SMP-05V-BC</b> , black <b>SMP-05V-NC</b> , natural (white) 	1,000
6	3.0A	<b>SMR-06V-B</b> , black <b>SMR-06V-N</b> , natural (white) 	500	<b>SMP-06V-BC</b> , black <b>SMP-06V-NC</b> , natural (white) 	500
7	3.0A	<b>SMR-07V-B</b> , black <b>SMR-07V-N</b> , natural (white) 	500	<b>SMP-07V-BC</b> , black <b>SMP-07V-NC</b> , natural (white) 	500
8	3.0A	<b>SMR-08V-B</b> , black <b>SMR-08V-N</b> , natural (white) 	500	<b>SMP-08V-BC</b> , black <b>SMP-08V-NC</b> , natural (white) 	500
9	3.0A	<b>SMR-09V-B</b> , black <b>SMR-09V-N</b> , natural (white) 	500	<b>SMP-09V-BC</b> , black <b>SMP-09V-NC</b> , natural (white) 	500

# SM CONNECTOR

## Housing

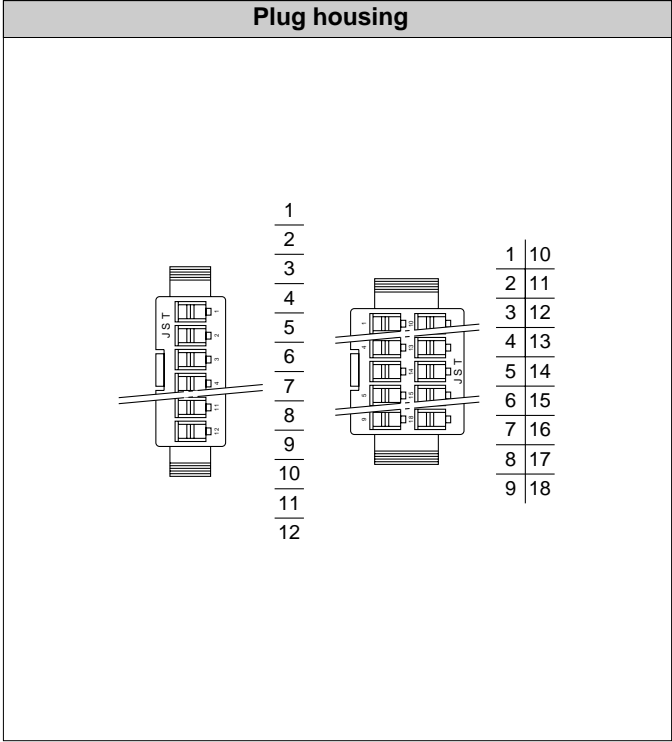
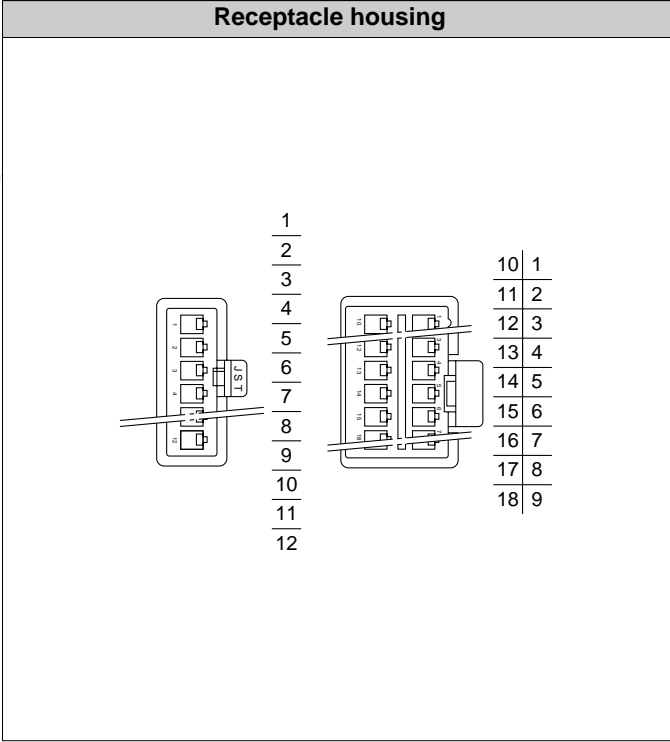
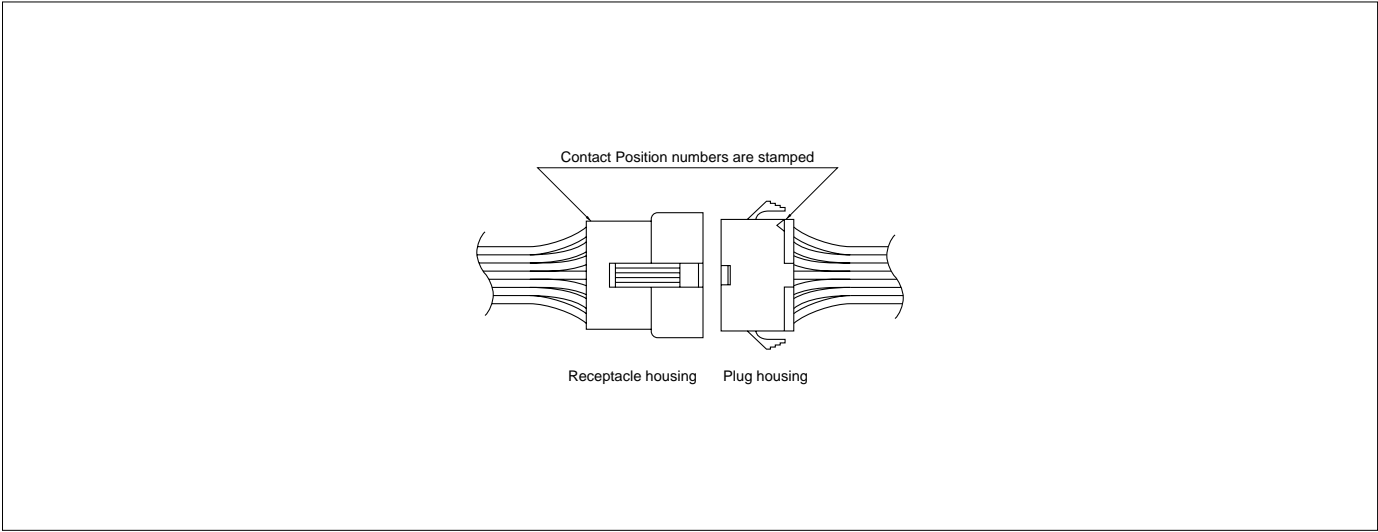
Material: Nylon6, UL94V-0

Circuits	Current rating	Receptacle housing(for pin contact)		Q'ty / bag	Plug housing(for socket contact)		Q'ty / bag
10	3.0A	<b>SMR-10V-B</b> , black <b>SMR-10V-N</b> , natural (white) 	200	<b>SMP-10V-BC</b> , black <b>SMP-10V-NC</b> , natural (white) 	500		
11	3.0A	<b>SMR-11V-B</b> , black <b>SMR-11V-N</b> , natural (white) 	200	<b>SMP-11V-BC</b> , black <b>SMP-11V-NC</b> , natural (white) 	500		
12	3.0A	<b>SMR-12V-B</b> , black <b>SMR-12V-N</b> , natural (white) 	200	<b>SMP-12V-BC</b> , black <b>SMP-12V-NC</b> , natural (white) 	500		
18	2.0A	<b>SMR-18V-B</b> , black <b>SMR-18V-N</b> , natural (white) 	200	<b>SMP-18V-BC</b> , black <b>SMP-18V-NC</b> , natural (white) 	500		

**Note:**

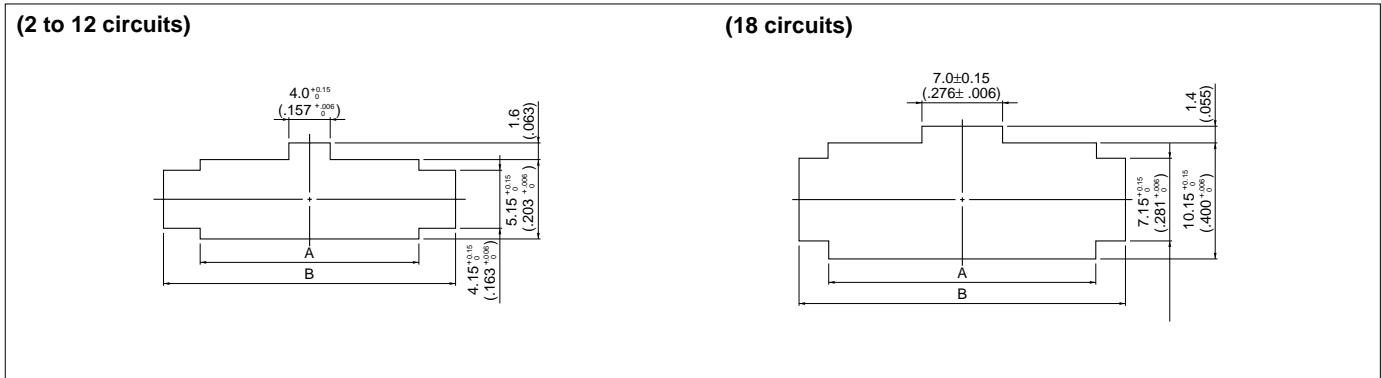
- SM connectors with any number of circuits can be either panel mounted or free hanging.
- Contact JST for special products.

## Contact position location numbers



# SM CONNECTOR

## Panel layout

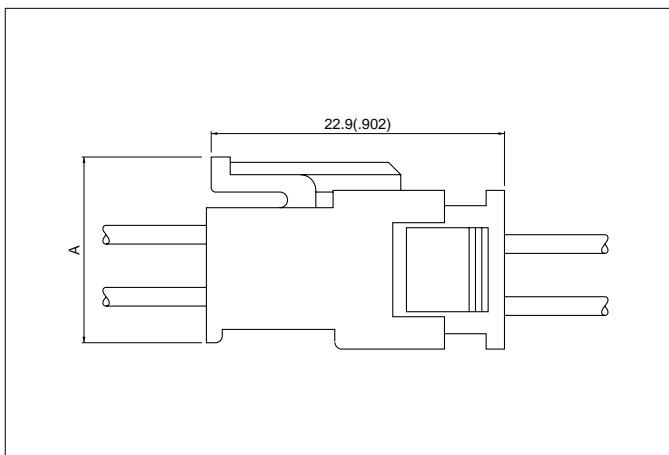


Circuits	Housing Model No.	Panel thickness mm(in.)					
		0.5 to 0.9(.020 to .035)		1.0 to 1.5(.039 to .059)		1.5 to 2.0(.059 to .079)	
		A $\pm 0.15$ ( $\pm 0.006$ )	B $\pm 0.1$ ( $\pm 0.004$ )	A $\pm 0.15$ ( $\pm 0.006$ )	B $\pm 0.1$ ( $\pm 0.004$ )	A $\pm 0.15$ ( $\pm 0.006$ )	B $\pm 0.1$ ( $\pm 0.004$ )
2	SMP-02V-B(N)C	5.7(.224)	9.6(.378)	5.7(.224)	9.8(.386)	5.7(.224)	10.0(.394)
3	SMP-03V-B(N)C	8.2(.323)	12.1(.476)	8.2(.323)	12.3(.484)	8.2(.323)	12.5(.492)
4	SMP-04V-B(N)C	10.7(.421)	14.6(.575)	10.7(.421)	14.8(.583)	10.7(.421)	15.0(.591)
5	SMP-05V-B(N)C	13.2(.520)	17.1(.673)	13.2(.520)	17.3(.681)	13.2(.520)	17.5(.689)
6	SMP-06V-B(N)C	15.7(.618)	19.6(.772)	15.7(.618)	19.8(.780)	15.7(.618)	20.0(.787)
7	SMP-07V-B(N)C	18.2(.717)	22.1(.870)	18.2(.717)	22.3(.878)	18.2(.717)	22.5(.886)
8	SMP-08V-B(N)C	20.7(.815)	24.6(.969)	20.7(.815)	24.8(.976)	20.7(.815)	25.0(.984)
9	SMP-09V-B(N)C	23.2(.913)	27.1(1.067)	23.2(.913)	27.3(1.075)	23.2(.913)	27.5(1.083)
10	SMP-10V-B(N)C	25.7(1.012)	29.6(1.165)	25.7(1.012)	29.8(1.173)	25.7(1.012)	30.0(1.181)
11	SMP-11V-B(N)C	28.2(1.110)	32.1(1.264)	28.2(1.110)	32.3(1.272)	28.2(1.110)	32.5(1.280)
12	SMP-12V-B(N)C	30.7(1.209)	34.6(1.362)	30.7(1.209)	34.8(1.370)	30.7(1.209)	35.0(1.378)
18	SMP-18V-B(N)C	23.2(.913)	27.2(1.071)	23.2(.913)	27.4(1.079)	23.2(.913)	27.6(1.087)

**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.

## Assembly layout



Circuits	Dimension A mm(in.)
2 to 12	8.7(.343)
18	14.5(.571)