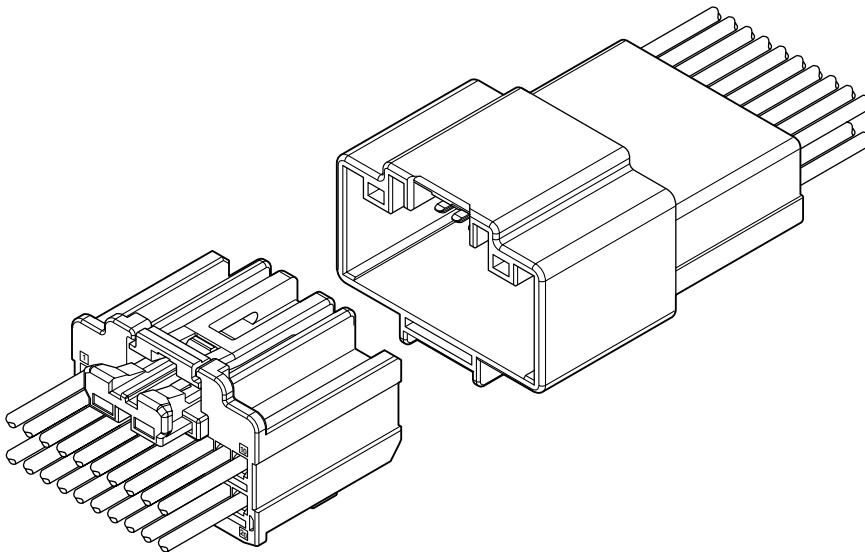


### Features

- 20 circuits, Wire-to-Wire Connection
- Connector Position Assurance (CPA) Design
- Unsealed Inline Connector
- 1.2 mm Terminal Compliant with USCAR Standards

1.2 mm unsealed wire-to-wire connector system for automotive applications.



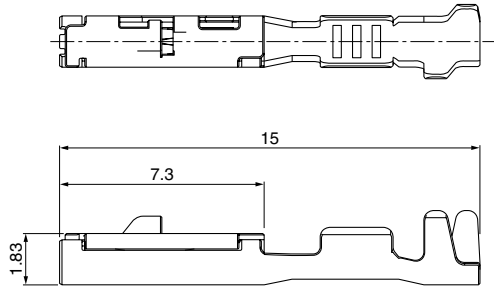
### Specifications

- Current rating: 14 A AC, DC max (0.75 mm<sup>2</sup>, Single circuit)
- Voltage rating: 14 V AC, DC
- Temperature range: -40°C to +105°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 8 mΩ max.  
After environmental tests/ 8 mΩ max.
- Insulation resistance: 100 MΩ min.
- Withstanding voltage: 1,000 VAC/minute
- Applicable wire: FLRY-A 0.35 to 0.75 mm<sup>2</sup>  
FLRY-B 0.75 mm<sup>2</sup>

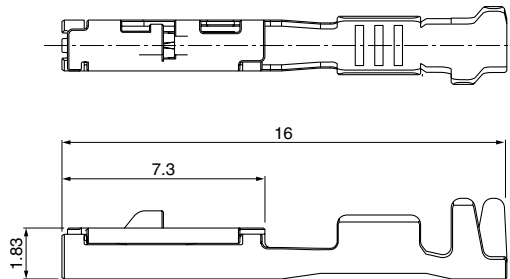
- \* Compliant with ELV/RoHS.
- \* Contact JST for details.

## Female terminal

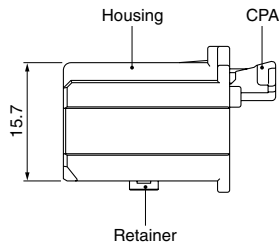
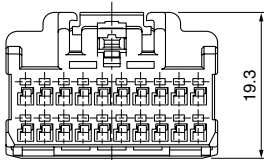
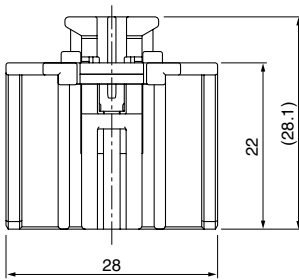
### SS barrel



### S barrel



## Female connector



Size	Model No.	Applicable wire range		Q'ty/reel
		Conductor (mm <sup>2</sup> )	Insulation O.D. (mm)	
SS	①SMSA-A011T-M1.2	0.35	1.2 to 1.4	9,000
S	①SMSA-A031T-M1.2	0.5 to 0.75	1.6 to 1.9	8,500
SS	②SMSA-A011A-M1.2	0.35	1.2 to 1.4	9,000
S	②SMSA-A031A-M1.2	0.5 to 0.75	1.6 to 1.9	8,500

### Material and Finish

①Copper alloy, tin-plated (reflow treatment)

②Copper alloy, nickel-undercoated, Contact area: silver-plated  
Barrel area: tin-plated

Circuits	Model No.	Q'ty/box	Housing Color
20	20MSA-RBC-1A-A-K	378	Black

### Material

Housing: PBT

Retainer: Glass-filled PBT, Natural (White)

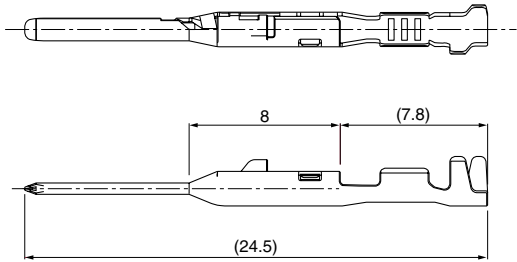
CPA: Glass-filled PBT, Natural (White)

Note: Color/Key codes other than above-mentioned housing are also available.  
Contact JST for details.

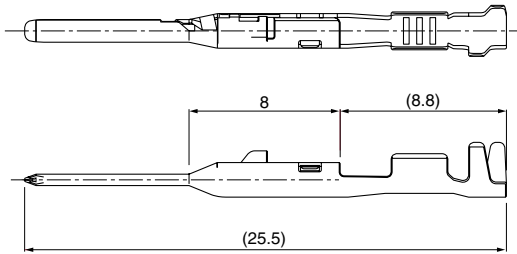
# MSA CONNECTOR

## Male terminal

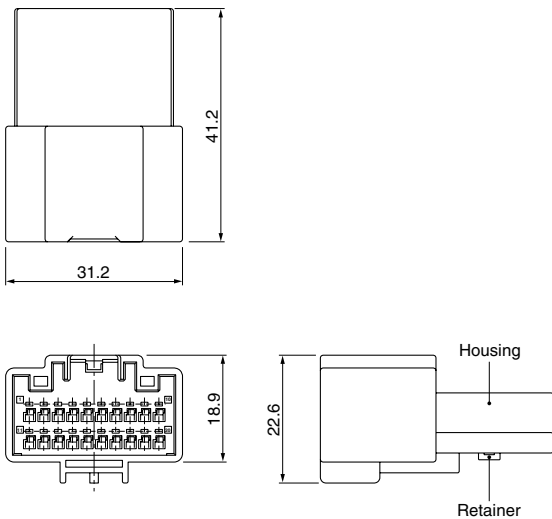
### SS barrel



### S barrel



## Male connector



Size	Model No.	Applicable wire range		Q'ty/reel
		Conductor (mm <sup>2</sup> )	Insulation O.D. (mm)	
SS	①SMSAW-A011T-M1.2	0.35	1.2 to 1.4	9,000
S	①SMSAW-A031T-M1.2	0.5 to 0.75	1.6 to 1.9	9,000
SS	②SMSAW-A011A-M1.2	0.35	1.2 to 1.4	9,000
S	②SMSAW-A031A-M1.2	0.5 to 0.75	1.6 to 1.9	9,000

#### Material and Finish

- ①Copper alloy, tin-plated (reflow treatment)
- ②Copper alloy, nickel-undercoated, Contact area: silver-plated  
Barrel area: tin-plated

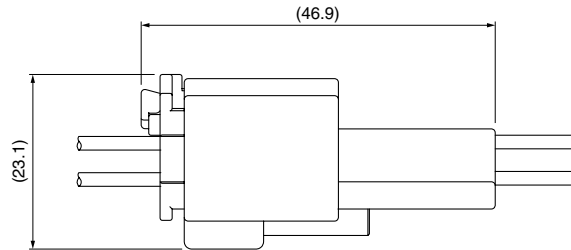
Circuits	Model No.	Q'ty/box	Housing Color
20	20MSA-PB-1A-A-K	216	Black

#### Material

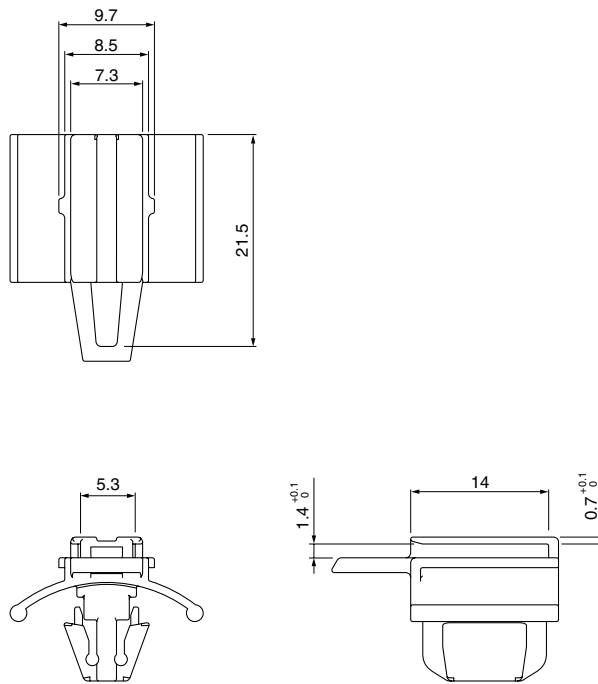
Housing: PBT  
Retainer: Glass-filled PBT, Natural (White)

Note: Color/Key codes other than above-mentioned housing are also available. Contact JST for details.

## Assembly layout



## Clip layout



## Crimping machine, Applicator

Strip terminal	Crimping machine	Crimp applicator MKS-L	
		Dies	Crimp applicator with dies
SMSA-A011()-M1.2	AP-K2N	MK/SMSA-A011-12	APLMK SMSA-A011-12
SMSA-A031()-M1.2		MK/SMSA-A031-12	APLMK SMSA-A031-12
SMSAW-A011()-M1.2		MK/SMSAW-A011-12	APLMK SMSAW-A011-12
SMSAW-A031()-M1.2		MK/SMSAW-A031-12	APLMK SMSAW-A031-12

Note: 1. Contact JST for details.

2. When crimping operation is conducted using an applicator and die set other than the above, JST cannot guarantee the performance of the terminal.