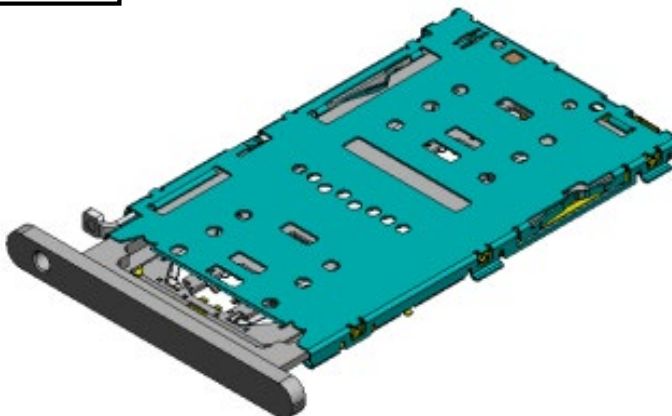


3-in-2 Type Card Connector  
(For nano SIM + nano SIM / microSD™ Cards)

CONNECTOR  
MB-0321-2  
Dec.2021

## ST19 Series

**RoHS Compliant**



For devices with communication functions such as smartphones, feature phones, and tablets, there is a growing demand to use multiple SIM cards on one device.

Furthermore, due to the downsizing of the devices, SIM cards are shifting from the conventional micro SIM (3FF) cards to smaller size nano SIM (4FF) cards. The ST19 Series is a compact and light weight 3-in-2 type combo push-eject tray connector that is compatible with two types of combination card usage patterns. 2 nano SIM cards, or 1 nano SIM card and 1 microSD card.  
(SIM: **S**ubscriber **I**dentify **M**odule)

### Applicable Market

Mobile phones, smartphones, tablet PCs, notebook PCs, and other small portable devices

### Features

- Compact and slim design --- 1.3 mm height, 17.49 mm width, 28.15 mm depth
- Compatible with two patterns  
Combination 1) nano SIM card x 1 pcs. + microSD™ card x 1 pcs.  
Combination 2) nano SIM card x 2 pcs.
- With tray detection switch (normally-closed type)
- Contact buckling prevention structure to avoid deformation of the contacts even if an empty card adapter is inserted.
- Tray mis-insertion countermeasure to prevent insertion of tray upside down.
- Compatible with thickness of nano SIM Cards that are manually cut to size by user.

\* microSD™ is a trademark of **SD** Card **A**ssociation

## General Specifications

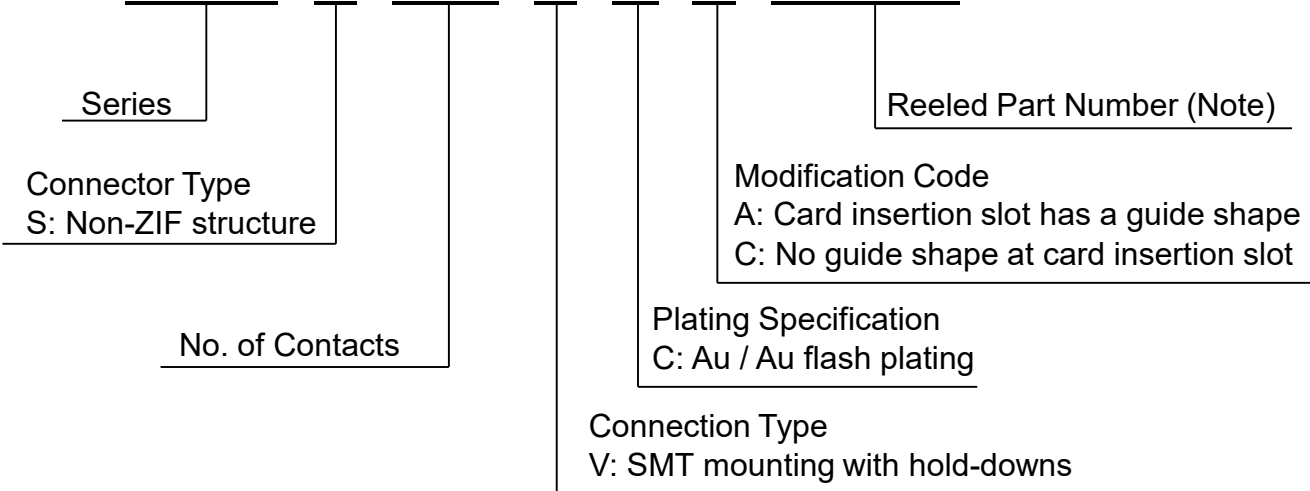
Number of Contacts	20 positions
Insulation Resistance	100MΩ min. (initial)
Dielectric Withstanding Voltage	AC250V rms. for 1 minute
Durability	2,500 mating cycles
Operating Temperature Range	-40°C ~ +85°C
Rated Current	0.5A
Rated Voltage	10 V

## Materials and Finishes

Components	Materials	Finishes
Signal Contact	Copper alloy	Au plating over Ni (Contact area) Au plating over Ni (Board mounting area)
Housing	Synthetic Resin	
Cover	Stainless steel	Au plating over Ni (Board mounting area)
Detection Switch	Copper alloy	Au plating over Ni (Contact area) Au plating over Ni (Board mounting area)
Eject Bar	Stainless steel	
Eject Lever	Stainless steel	

Ordering Information

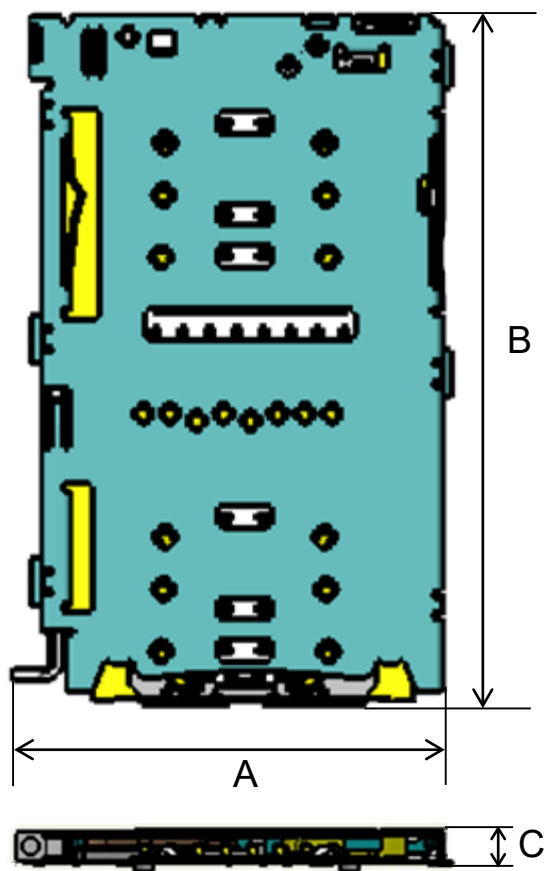
**ST19 S 020 V C A R1400**



Note) An embossed tape reel contains 1,400 pcs.

Please contact us for details on embossed tape specifications.

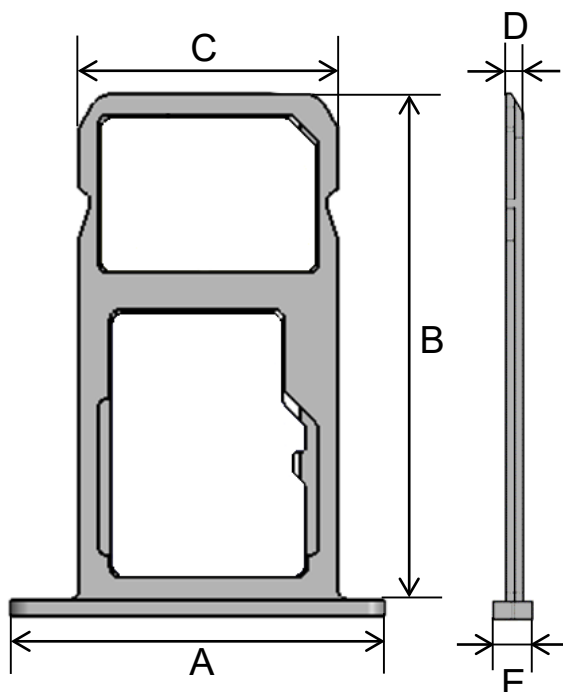
Outer Dimensions



Unit: mm

Dimensions	A	B	C
Product name			
ST19S020VCA	17.49	28.15	1.3
ST19S020VCC	17.49	28.15	1.3

**Recommended Tray External Dimensions**



Unit: mm

Dimensions	A	B	C	D	E
Product name					
Tray	21.2	28.7	14.7	0.97	2.2

Note 1: Above are recommended dimensions for tray which should be designed and manufactured by customers.

Note 2: The drawing above is for reference only. Please refer to our latest product drawing when using this product.

**Product Drawings and Specifications**

Part Number	Drawing Number	Specifications	Handling Instructions
ST19S020VCAR1400	SJ117667(Individual Product)	JACS-11162	JAHL-11162
	SJ117668(Reeled Product)		
ST19S020VCCR1400	SJ116137(Individual Product)		
	SJ116136(Reeled Product)		

**Notice:**

- The values specified in this brochure are only for reference. The products and their specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.
- Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.
- The products presented in this brochure are designed for the uses recommended below. We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.
  - Applications that require consultation:
    - Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:  
Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.
    - We may separately give you our support with a quality assurance program that you specify, when you think of a use such as :  
Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.
  - Recommended applications include:  
Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

**Japan Aviation Electronics Industry, Limited**

\* The specifications in this brochure are subject to change without notice. Please contact JAE for information.