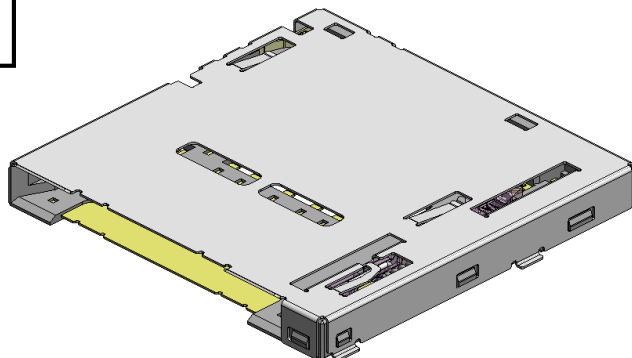


# SG50 Series

MB-0379-2

May.2022

**RoHS Compliant**

In addition to general applications such as PCs and DSCs, SD cards are also used as external recording media in production equipment applications such as robots and machine tools. We have developed an SD card connector with superior harsh environment performance that can be used safely for equipment that is expected to be used for long periods of time and under severe environmental conditions, such as production facilities.

The two points-of-contact terminal structure allows for a reliable connection in the presence of foreign matter such as dust and debris, and also has excellent vibration and shock resistance. It is a connector that can maintain high contact reliability over a long period of time.

A UHS-II SD card compatible variant is also available for future high-speed and high-capacity requirements.

SG50 Series is a push-push connector for SD cards with excellent environmental resistance. It is ideal for industrial equipment and other applications that require contact reliability and long service life.

## <Applicable Equipment>

Industrial equipment such as machine tools, robots, production facilities, industrial PCs, DSCs, etc.

## Features

- UHS-I, UHS-II compatible high-speed data-transfer memory
- The card ejection method is push-push type.
- 2-point contact structure with high contact reliability
- Mechanical lock structure for vibration and impact resistance
- Structure to prevent incorrect insertion of the card
- Card detection switch

General Specifications

Number of Contacts	9 positions (UHS-I) , 17 positions (UHS-II)
Contact Resistance	Signal: 100mΩ max. / Detect Switch:1Ω max. (initial)
Dielectric Withstanding Voltage	AC500V rms. for 1 minute
Durability	10,000 mating cycles
Operating Temperature Range	-40 ~ +85 °C
Rated Current	0.5A
Rated Voltage	10V

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 Frame	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)
Common switch	Copper alloy	Au plating over Ni (Contact area) Au plating over Ni (Board mounting area)
Protect switch	Copper alloy	Au plating over Ni (Contact area) Au plating over Ni (Board mounting area)
Eject bar	Synthetic resin	
Lock	Stainless steel	
Coil spring	Stainless steel	
Cam follower	Stainless steel	

Ordering Information

**SG50 S 017 V C A R500**

Series

Connector Type  
S: Non-ZIF structure

No. of Contacts

Reel Part Number (Note 1)

Modify code  
A: Applicable card: UHS-II  
B:Applicable card: UHS-I

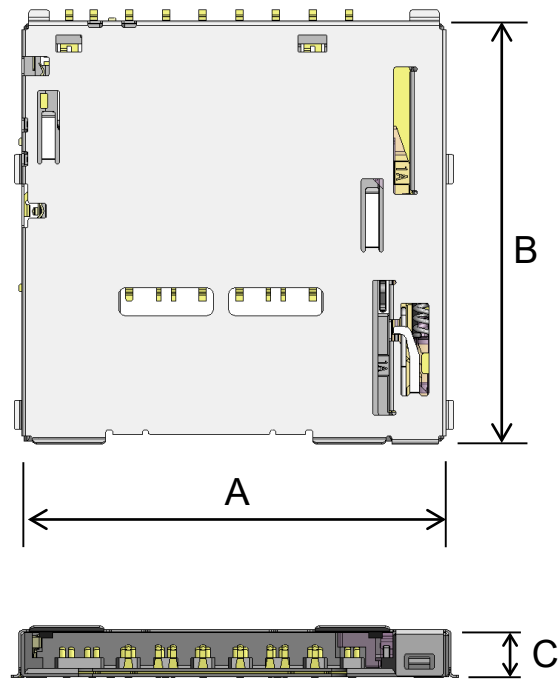
Plating Specifications  
C: Au/Au flash plating

Connection Type  
V: SMT mounting with hold-downs

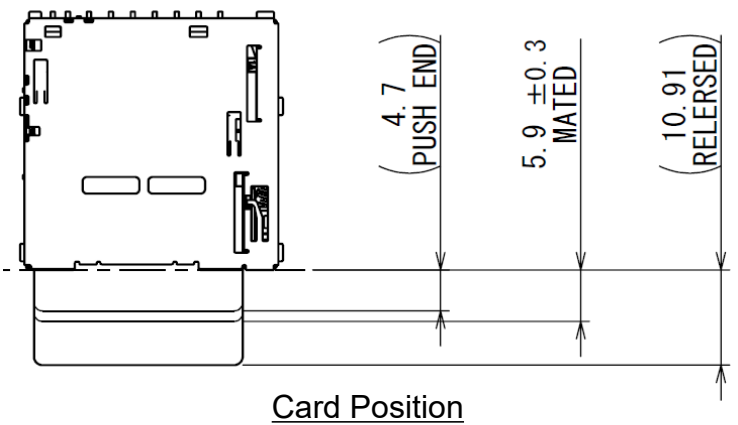
Note 1. Embossed packaging is 500 pcs/reel.  
Contact us for embossed taping specifications.

Outer Dimensions

Unit: mm



Dimensions			
Product name	A	B	C
SG50S017VCA	29.0	28.85	3.15
SG50S009VCB	29.0	28.85	3.15



Product Drawings and Specifications

Part Number	Drawing Number	Specifications	Handling Instructions
SG50S017VCAR500	SJ121251 (Individual Product)	JACS-11247	JAHL-11247
	SJ121252 (Reeled Product)		
SG50S009VCBR500	SJ121332 (Individual Product)		
	SJ121333 (Reeled Product)		

Notice:

1. 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.
2. 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.
3. 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.
- (1) Applications that require consultation:
- (i) 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.
- (ii) 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.
- (2) 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

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