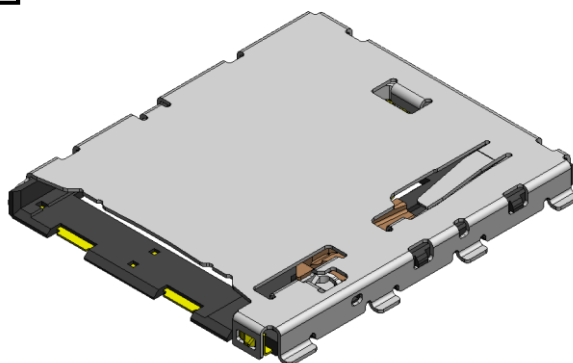## microSD™ EXPRESS Card Connector
ST51 Series

CONNECTOR
MB-0407-1
Jul.2025

RoHS Compliant

In recent years, the advancements in information and communication technology (ICT) devices, including video equipment, have led to increased electronic data capacities, requiring enhanced communication speeds and memory device performance. The microSD™ EXPRESS card, is an external storage device capable of quickly reading and writing large amounts of data in a compact size. The card offers even faster data transfer rates than the conventional high-speed standards such as UHS-I and UHS-II, and is expected to see increased demand in the market.

The ST51 series is a microSD™ EXPRESS-compatible push-push connector that retains the locking performance and robustness of previous connectors, while incorporating new measures for EMC and heat dissipation, which are important to manage with high-speed communication. The connector size remains similar to conventional products, and compatibility with UHS standard cards is preserved, making it usable in a variety of applications.

【Application】
All devices with expandable storage such as game consoles, action cameras, drive recorders, drones, PC's, etc.

Features

- microSD™ EXPRESS CARD Connector
- Easy to use push-push card eject mechanism
- Card detection switch included
- Strong mechanical lock structure for vibration and shock resistance
- Multi-point hold-down structure for strength, EMC, and heat dissipation
- Card mis-insertion prevention structure

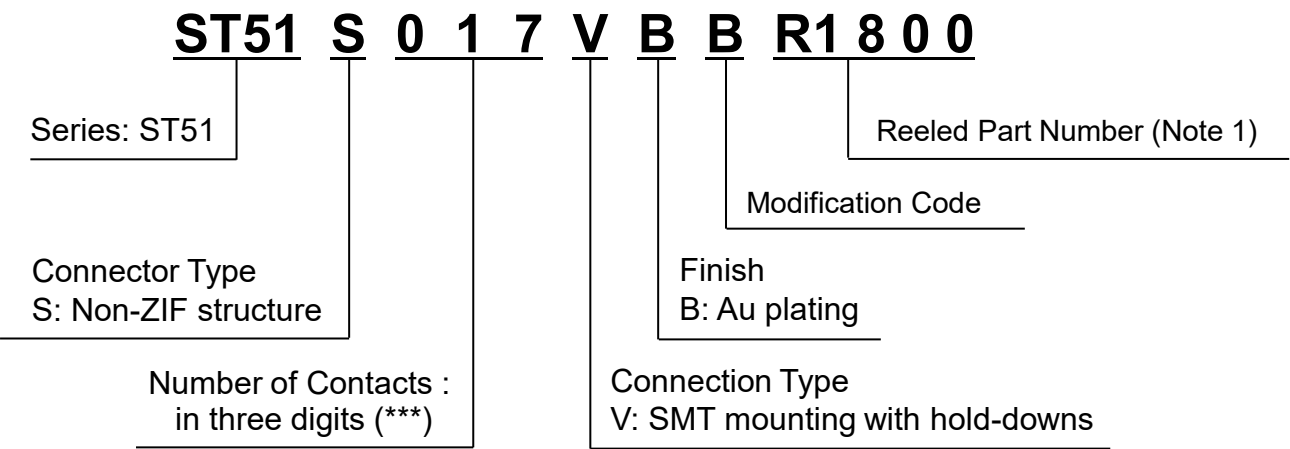*microSD™ is a trademark of SD Association.

General Specifications

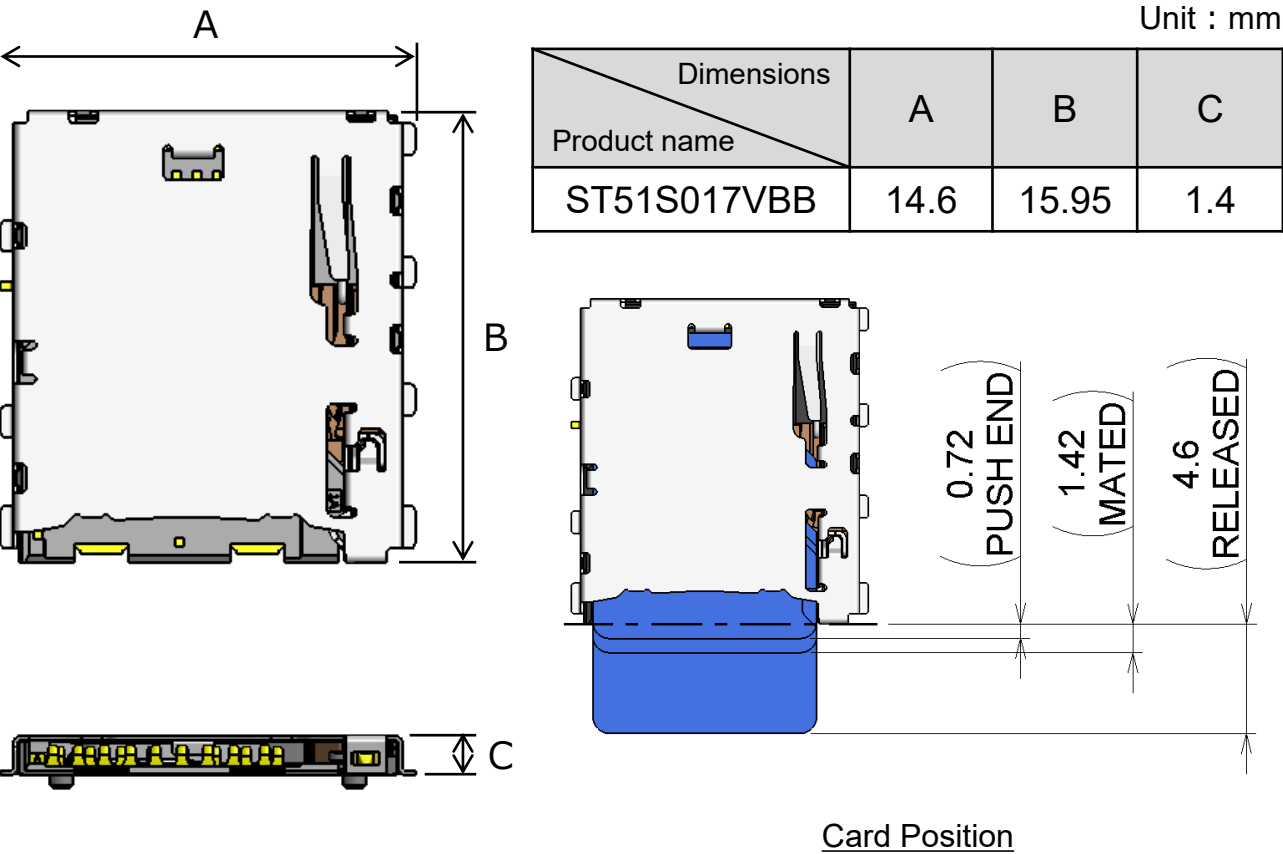|	
Number of Contacts	17 pos. + 2 pos.(Switch)
Contact Resistance	Signal:100mΩ max. (initial) Detection Switch:1Ω max. (initial)
Dielectric Withstanding Voltage	AC500Vr.m.s. (per minute)
Insulation Resistance	1000MΩ min. (initial)
Durability	5,000 mating cycles
Operating Temperature Range	-25 deg. C to +85 deg. C
Rated Current	1A Max.
Rated Voltage	10V Max.

Materials and Finishes

Components	Materials	Finishes
Contact	Copper alloy	Au/Ni plating (Contact and mounting area)
Housing	Heat-resistant plastic	-
Cover Frame	Stainless steel	Au/Ni plating (Mounting area)
Detection Switch	Titanium copper alloy	Au/Ni plating (Contact and mounting area)
Eject Bar	Heat-resistant plastic	-
Lock	Stainless steel	-
Coil Spring	Stainless steel	-
Cam Follower	Stainless steel	-

Ordering Information

ST51 S 0 1 7 V B B R1 8 0 0

Series: ST51

Connector Type
S: Non-ZIF structure

Number of Contacts :
in three digits (***)

Connection Type
V: SMT mounting with hold-downs

Finish
B: Au plating

Modification Code

Reeled Part Number (Note 1)

Note 1) An embossed tape reel contains 1,800 pieces.
　　　　　Please contact us for details on embossed tape specifications.

Outer Dimensions

Unit : mm

Dimensions / Product name	A	B	C
ST51S017VBB	14.6	15.95	1.4

0.72 (PUSH END)　1.42 (MATED)　4.6 (RELEASED)

Card Position

Product Drawings and Specifications

Part Number	Drawing Number	Specifications	Handling Instructions
ST51S017VBBR1800	SJ130693 (Individual Product)	JACS-11394	JAHL-11394
	SJ130694 (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

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