

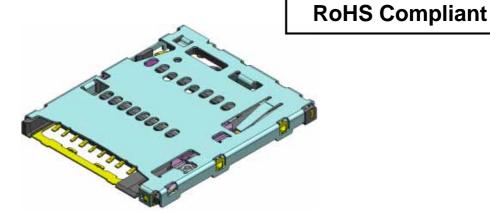


UHS-II Compatible microSDTM Card Connector CONNECTOR

MB-0325-1

ST50 Series

December 2017



Outline

MicroSD cards are widely used as an external storage medium for compact devices such as smartphones, cameras, tablets and notebook PCs.

Recently high-speed reading and writing requirements are increasing to allow the transfer of large image and video files, and also to install and run apps (applications) on smartphones.

Due to the increasing user demand, microSD cards compatible with the memory card standard UHS-II with maximum data writing speed up to 312MB/s, are becoming widespread.

The ST50 Series is a push-push connector compatible with the UHS-II microSD cards.

Features

- Compatible with microSD card Ultra High Speed data transfer standard UHS-II. (Backwards compatible with UHS-I microSD card and other existing microSD cards)
- Compact slim design, 16.3mm depth, 13.7mm width, 1.35mm height
- Push-push type card eject method.
- Maintaining good operability with the long card eject length (3.0mm min.)
- Includes card detection switch (normally-closed types)
- 8-point hold downs for heat-emission.

General Specifications

■ No. of Contacts: 17 pos.

■Contact Resistance: 100mΩ max. (initial)

■Dielectric Withstanding Voltage:

AC500Vr.m.s for 1 minute

■ Operating Temperature: -25 ° C ~ +85 ° C

■Rated Current: 0.5A ■Rated Voltage: 10V

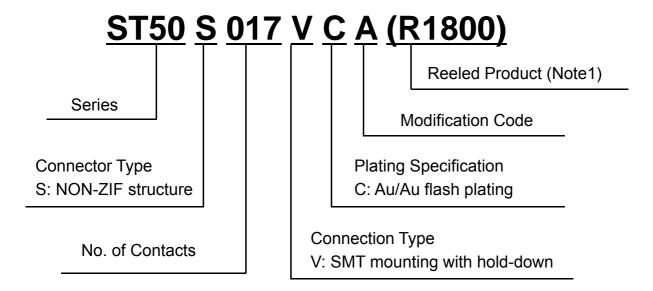
■Durability: 5,000 times

^{*} microSDTM is a trademark of SD Association.

Materials and Finishes

Component	Material	Finish
Signal Contact	Copper alloy	Au plating over Ni (Contact area) Au plating over Ni (Board mounting area)
Housing	Heat-resistant plastic	
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)
VDD2 Switch	Copper alloy	Au plating over Ni (Contact area) Au plating over Ni (Board mounting area)
Eject Bar	Heat-resistant plastic	
Lock	Stainless steel	
Spring	Stainless steel	
Cam Follower	Stainless steel	

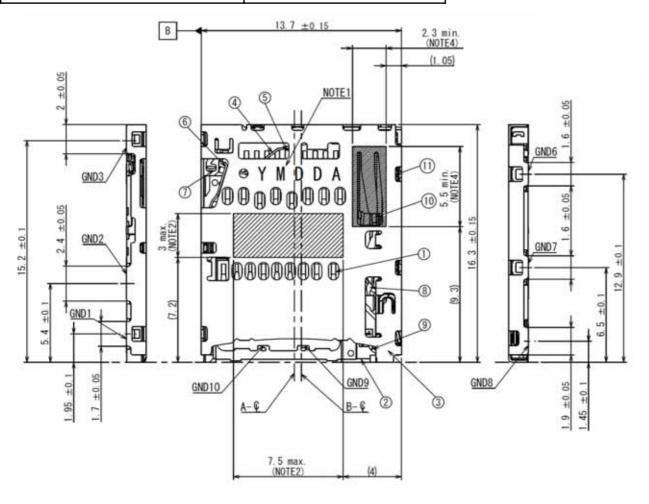
Ordering Information

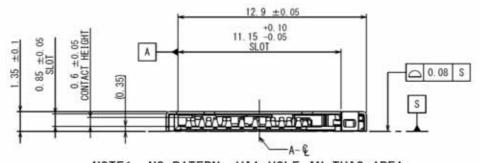


Note) An embossed tape reel contains 1,800 pcs.

Please contact us for details on embossed tape specifications.

Part Number	Drawing No.
ST50S17VCA	SJ117915





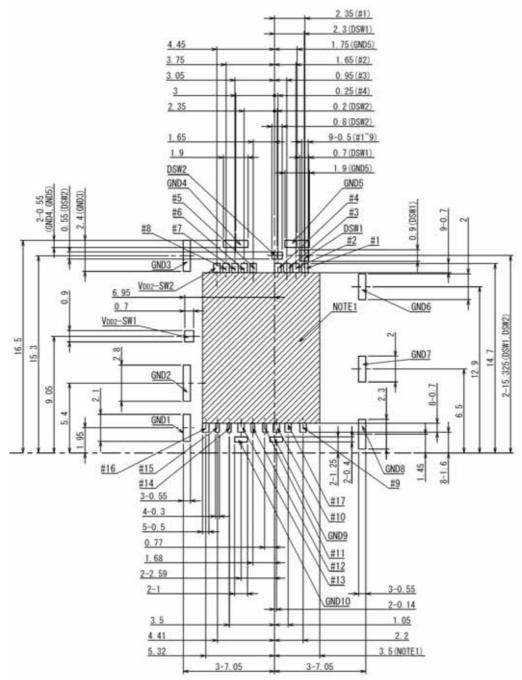
NOTE1. NO PATERN, VIA HOLE IN THIS AREA. NOTE2. VACUUM AREA.

NOTE4. LOAD SHOULD NOT BE APPLIED ON THIS AREA.

Unit: mm

11	COIL SPRING		ISTAINLESS (Ф0.2)	-	
	CAM FOLLOWER LOCK		ISTAINLESS (ФО. 3)	-	
8	EJECT BAR		ILCP	-	COLOR: BLACK
7	VDD2-SW2	1	COPPER ALLOY (tO. 1)	Contact: Au (0.3 μ m UP) over Ni (1 μ m UP) Terminal: Au (0.03 μ m UP) over Ni (1 μ m UP)	
6	VDD2-SW1	1	COPPER ALLOY (to, 12)	Contact: Au (0, 3 μm UP) over Ni (1 μm UP) Terminal: Au (0, 03 μm UP) over Ni (1 μm UP)	
5	DETECTION SW2	1	COPPER ALLOY(tO. 1)	Contact: Au (0.3 \(\mu\) m UP) over Ni (1 \(\mu\) m UP) Terminal: Au (0.03 \(\mu\) m UP) over Ni (1 \(\mu\) m UP)	
4	DETECTION SW1 (GND)	1	COPPER ALLOY(tO. 12)	Contact: Au $(0.3 \mu \text{m UP})$ over Ni $(1 \mu \text{m UP})$ Terminal: Au $(0.03 \mu \text{m UP})$ over Ni $(1 \mu \text{m UP})$	
	COVER FRAME	_1_	STAINLESS (to. 15)	Terminal: Au(0, 03 µm UP) over Ni (1 µm UP)	
2	HOUS ING	1	LCP	-	COLOR: BLACK
1	CONTACT	1	COPPER ALLOY(t0.1)	Contact: Au (0.5 μm UP) over Ni (2 μm UP) Terminal: Au (0.03 μm UP) over Ni (1 μm UP)	
特号 NO.	名 称 DESCRIPTION	個 数 QTY	## ## MATERIAL	仕上 FINISH	個 考 REMARKS

Note: Above drawing is for reference only. Please refer to the most updated drawing when considering use of this product.



Applicable Board Dimensions

NOTE1. NO PATERN, VIA HOLE IN THIS AREA.

Unit: mm

PIN ASSIGNENMENT

Pin#	Name
1.	DAT2
2	CD/DAT3
3	CMD
4	V _{DD1}
5	CLK
6	Vss
7	DATORCLK+
8	DAT1RCLK-
9	V _{DD2}
10	Vss
11	DO+
12	DO-
13	Vss
14	D1-
15	D1+
16	Vss
17	SWIO

TABLE. 2 DETECTION SW

	WITHOUT CARD	CARD MATED
DETECTION SW	4 ⊶ • • • • • • • • • • • • • • • • • •	4-0-5 GND

TABLE. 3 VDD2 SW

THOOTI		
	WITHOUT CARD	CARD MATED
VDD2 SW	6~~7	6 ⊶•7
	VDD2 ₩	VDD2 ₩

Note: Above drawing is for reference only.

Please refer to the most updated drawing when considering use of this product.

Technical Documents

Part Number	ST50S017VCAR1800
Drawing No.	Individual Product: SJ117915 Reeled Product: SJ117916
Specifications	JACS-11173
Handling Instructions	JAHL-11173

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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