SG1/SG2/SG3 SERIES CONNECTORS

Connectors for SD Card

SG Series is a socket for SD (secure digital) cards, which was standardized as a small memory or I/O card for small mobile devices by the SDA. (SDA: SD Card Association)

FEATURES

- Also compatible with MultiMedia Card
- Employs a new push-push eject mechanism
- Space saving design with hold-downs & SMT contacts located inside frame
- Audible click on insertion/removal
- Live insertion - pin nos. 3 and 4 connect with the card first
- Card insertion detection mechanism (pin no. 1 makes contact last)
- Write protect switch lock/unlock detection mechanism for SD card
- Card locking mechanism type available (only on SD card)

MATERIALS AND FINISHES

Description	Materials/ Finishes
Contact	Copper alloy Contact portion: Au plating over Ni Terminal portion: Sn-Pb plating over Ni
Card detection switch	Copper alloy Contact portion: Au plating over Ni Terminal portion: Sn-Pb plating over Ni
Write protect switch	
Housing	Glass filled LCP
Eject bar	Glass filled Nylon
Cover (including hold-down)	Stainless steel
Cam follower	Stainless steel
Spring	Piano wire/ zinc galvanizing
Spring for locking	Stainless steel

GENERAL SPECIFICATIONS

Number of Contacts	No. of contacts: 13 SG1 12 SG2 & SG3
Current rating	Less than 0.5A
Dielectric withstand voltage	500 VAC r.m.s. (for one minute)
Insulation resistance	1000 megaohms min
Contact resistance	100 milliohms max
Operating temperature	-25 ° C to +85 ° C
Rated voltage	3.3V

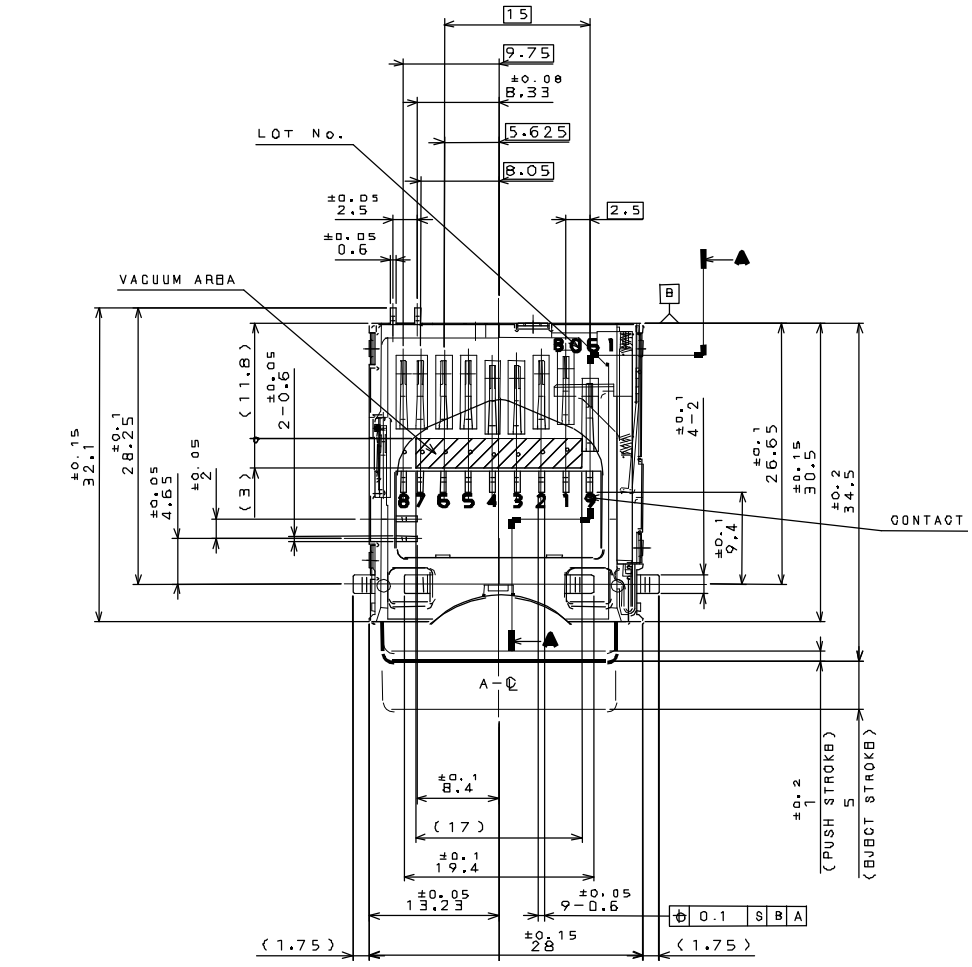
ORDERING INFORMATION

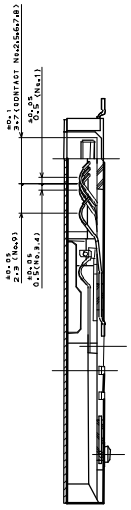
SG2S 012 V 1 C E500

- SG2S — Series: SG1V, SG2S, SG3S
- 012 — No. of contacts: 012, 013
- V — Height code: V = 3.3 (SG1), S = 2.9 (SG2 & SG3)
- 1 — Contact finish: Au plating over Ni
- C — Modification code: C: Bottom mount type
- E500 — Tape & reel packaging: E400 (SG1), E500 (SG2 & SG3)

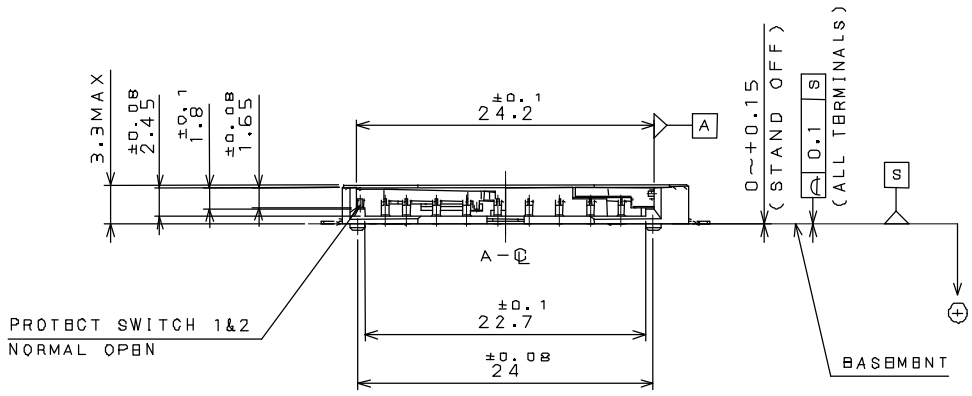
Dimensions in mm (inches).

SG1V013S1*E400



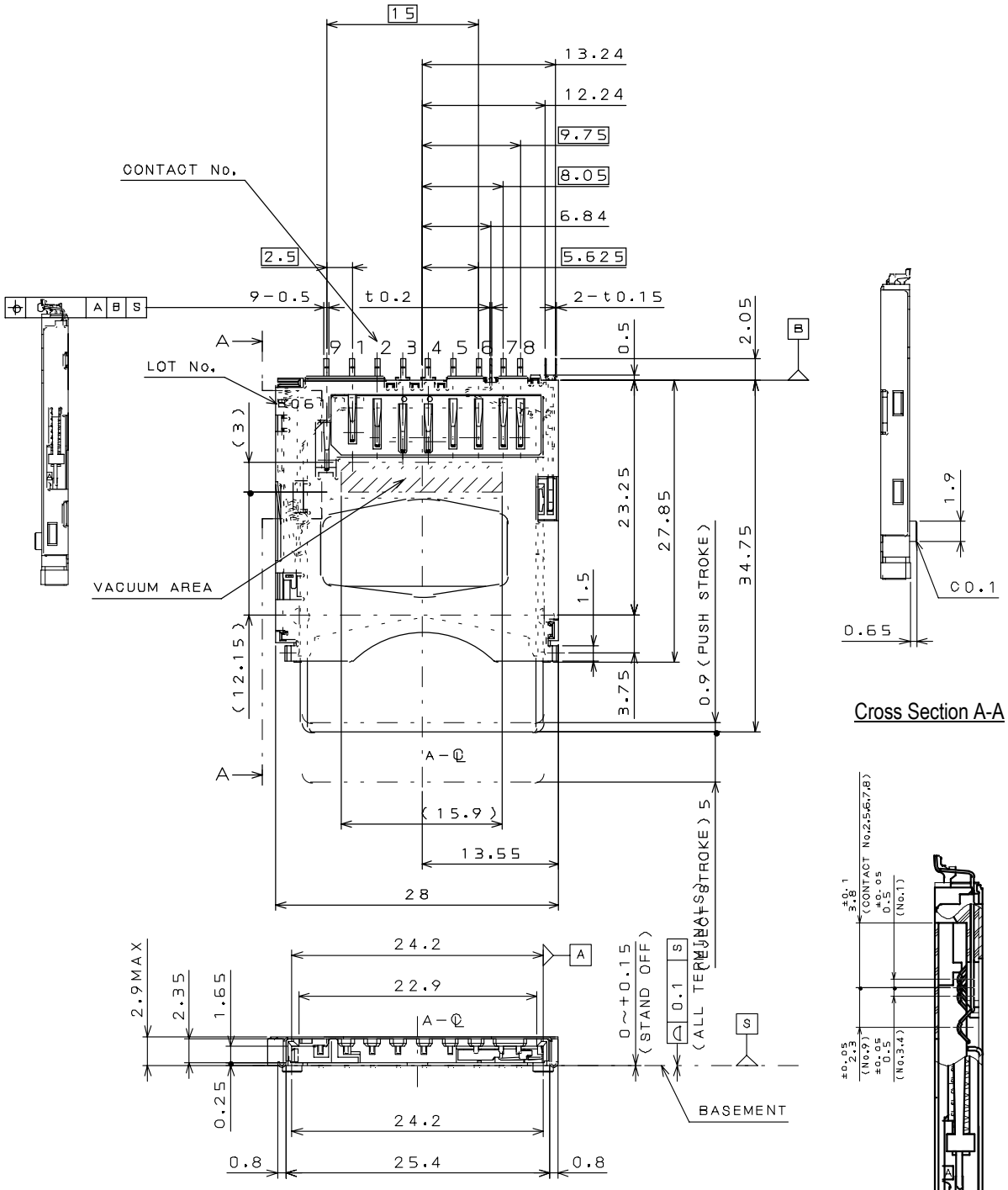


Cross Section:
A-A



Dimensions in mm (inches).

SG2S012V1C

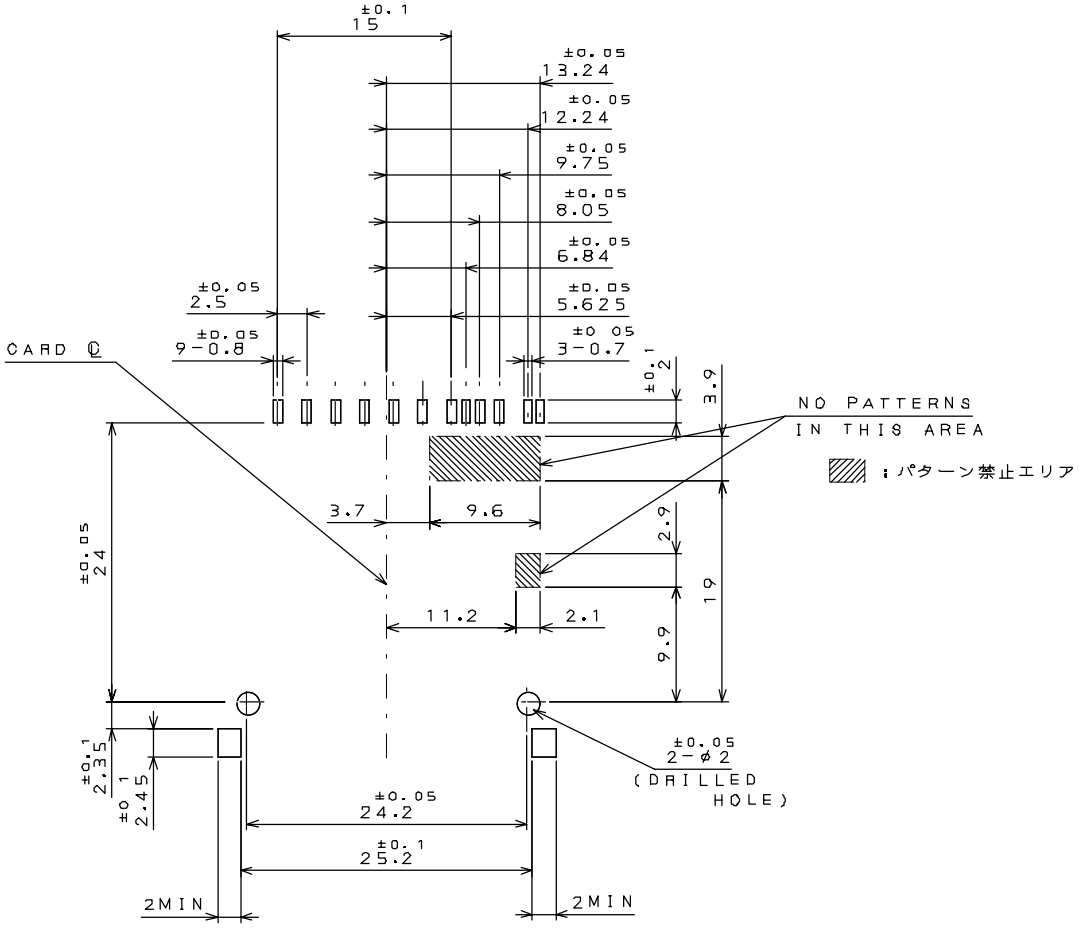


Precautions regarding C type with card locking mechanism:
Pulling out the inserted card by force may damage the card itself as well as the connector.
JAE strongly recommends mounting the connector in the position where the housing shall cover its insertion mouth area in order to prevent users from picking up the card end with their fingertips.

Multimedia cards without grooves are not applicable.

Dimensions in mm (inches).

Board attachment dimensions (for reference)



Detection circuit

TABLE 1. CIRCUIT (REF.)

	WITHOUT CARD	CARD INSERTED	
		WRITE PROTECT : LOCK	WRITE PROTECT : UNLOCK
PROTECT SWITCH	3 — 2, GND	3 — 2, GND	3 — 2, GND
DETECTION SWITCH	3 — 9, GND	3 — 9, GND	3 — 9, GND

Dimensions in mm (inches).