

**MODEL:** SD7-5-A | **DESCRIPTION:** SD 7.0 CARD CONNECTOR**FEATURES**

- SD 7.0 card connector
- push in, auto-eject out
- card detect switch
- write protect
- surface mount
- 18 pin
- 2.9 mm profile

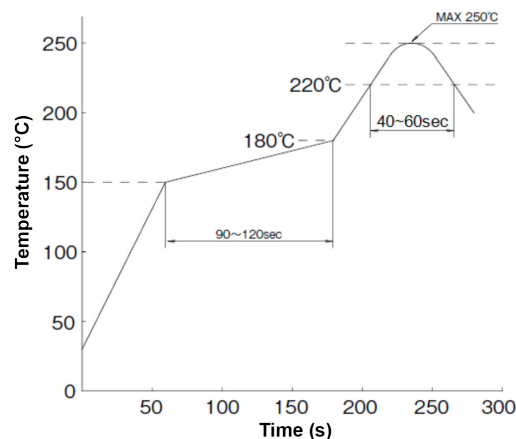
**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
rated voltage				30	V
rated current				0.5	A
contact resistance ¹				100	mΩ
insulation resistance	at 500 Vdc, between adjacent circuits	1,000			MΩ
voltage withstand	for 1 minute, between adjacent circuits		500		Vac
insertion force	at a rate of 25 mm/min			40	N
withdrawal force	at a rate of 25 mm/min	0.5		40	N
life			5,000		cycles
operating temperature		-25		85	°C
flammability rating	UL94V-0				
RoHS	yes				

Note: 1. When measured at 20 mV / 100 mA.

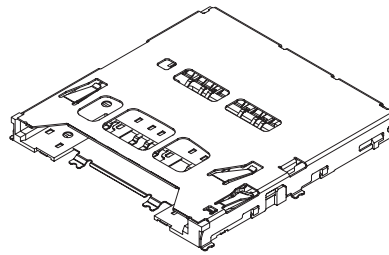
SOLDERABILITY

parameter	conditions/description	min	typ	max	units
reel storage	at relative humidity 40-70% reel opened: use within 1 month reel unopened: up to 15 month shelf life	16	22	28	°C
reflow soldering	see reflow profile			250	°C

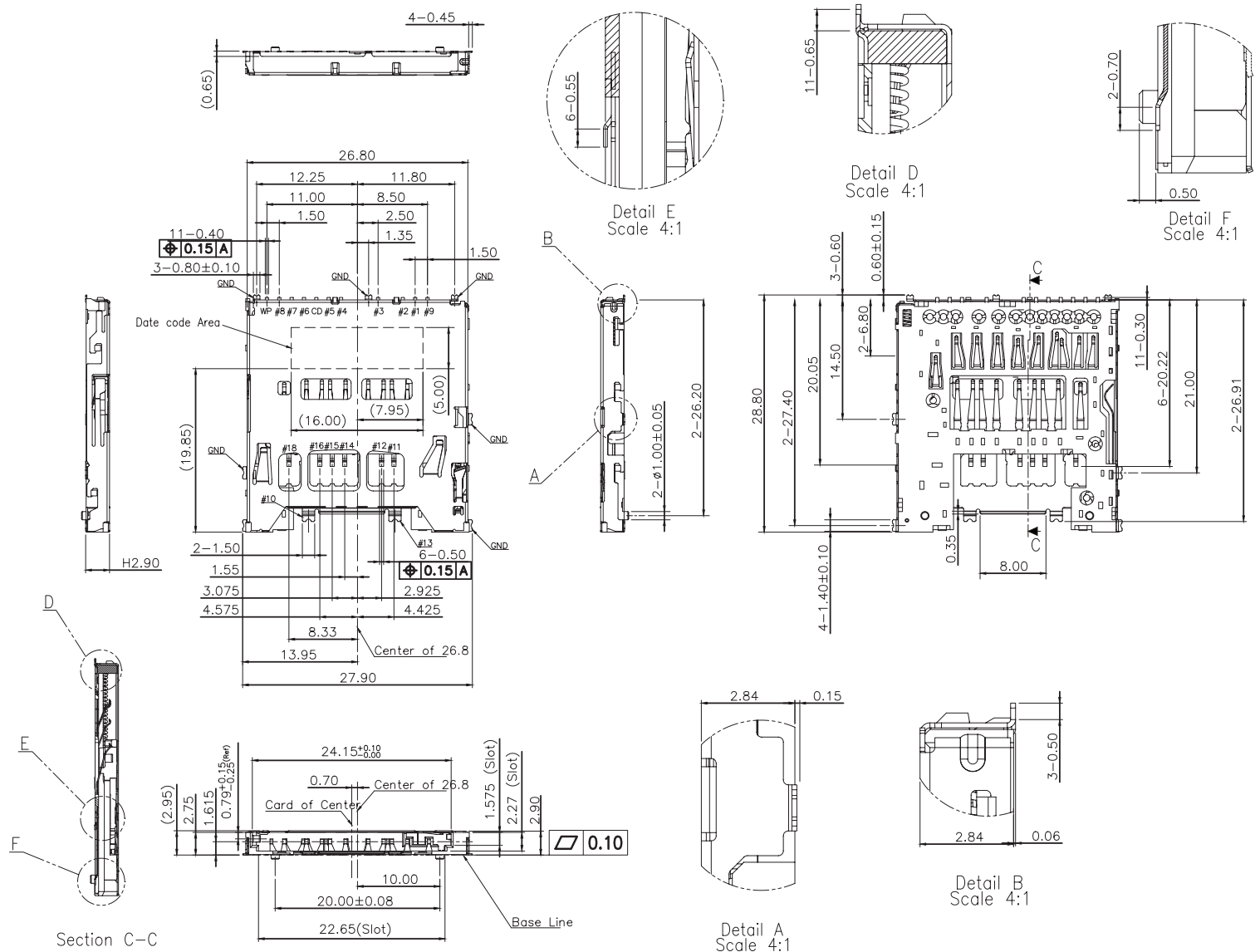


MECHANICAL DRAWING

units: mm
 tolerance:
 X.X ± 0.35 mm
 X.XX ± 0.20 mm
 X.XXX ± 0.10 mm
 unless otherwise specified

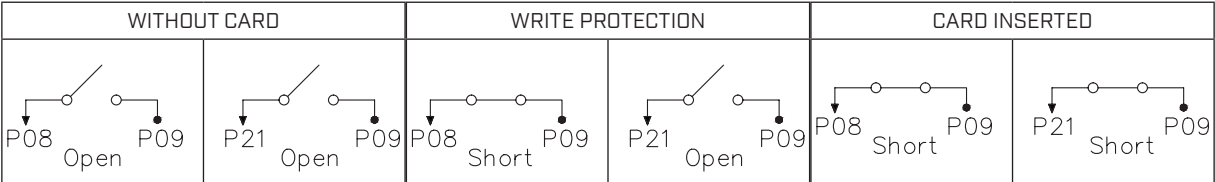


DESCRIPTION	MATERIAL	PLATING/COLOR
housing	LCP [UL94V-0]	black
contact terminals	C5210 t=0.12 mm	contact area: 1 μ " min gold over 50 μ " min nickel solder area: gold flash over 50 μ " min nickel
cover	SUS304 t=0.15 mm	solder area: 50 μ " min nickel



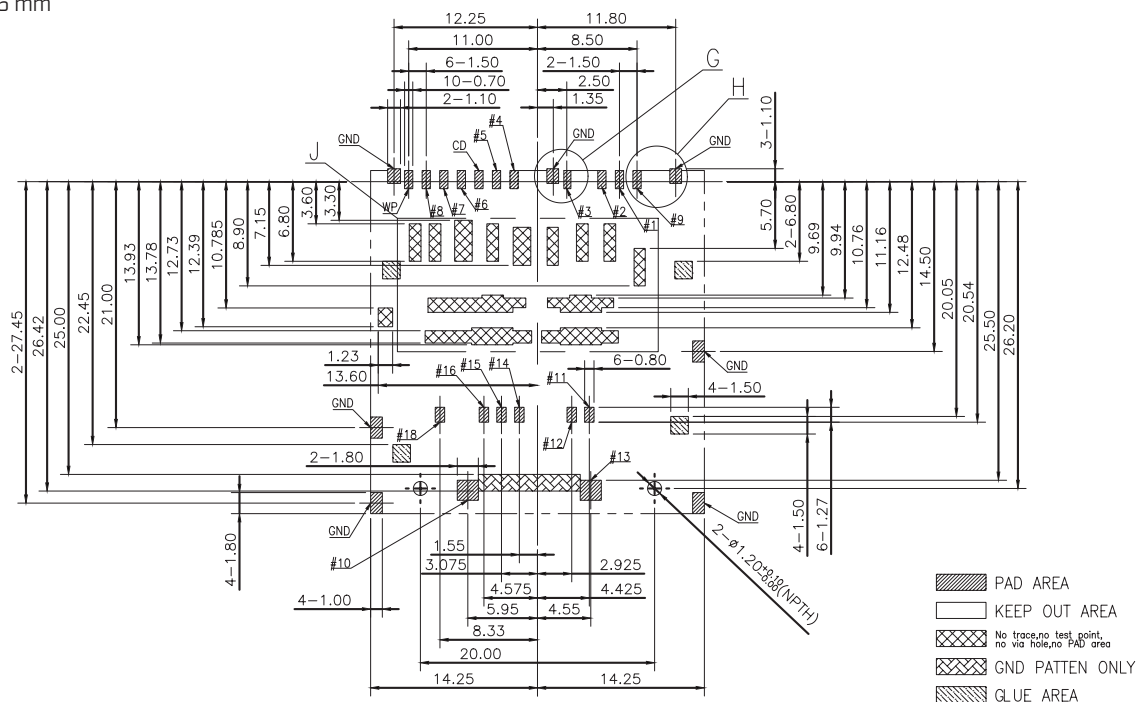
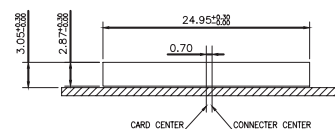
MECHANICAL DRAWING (CONTINUED)

PIN CONNECTIONS						
CONNECTOR PIN#	SD MODE		UHS-II MODE		SD EXPRESS MODE	
	SIGNAL NAME	DESCRIPTION	SIGNAL NAME	DESCRIPTION	SIGNAL NAME	DESCRIPTION
P1	-	NOT USED	VSS3	SUPPLY VOLTAGE GROUND	VSS3	SUPPLY VOLTAGE GROUND
P2	-	NOT USED	-	NOT USED	RESERVED	RESERVED AREA FOR FUTURE PAD EXTENSION
P3	DAT2	DATA LINE (BIT 2)	-	NOT USED	CLKREQ#	REFERENCE CLOCK REQUEST SIGNAL. ALSO USED BY L1 PM SUB- STATES
P4	-	NOT USED	DD+	DIFFERENTIAL DATA 0+	PCIe TX+	PCIe TX+
P5	CD/DAT3	CARD DETECT/DATA LINE (BIT 3)	-	NOT USED	PERST#	PE-RESET IS A FUNCTIONAL RESET
P6	-	NOT USED	DD-	DIFFERENTIAL DATA 0-	PCIe TX-	PCIe TX-
P7	CMD	COMMAND/RESPONSE	-	NOT USED	-	NOT USED
P8	CD	CARD DETECT	CD	CARD DETECT	CD	CARD DETECT
P9	VSS1	SUPPLY VOLTAGE GROUND	VSS1	SUPPLY VOLTAGE GROUND	VSS1	SUPPLY VOLTAGE GROUND
P10	-	NOT USED	VSS4	SUPPLY VOLTAGE GROUND	VSS4	SUPPLY VOLTAGE GROUND
P11	-	NOT USED	VDD2	SUPPLY VOLTAGE (1.8 V)	VDD2	SUPPLY VOLTAGE (1.8 V)
P12	VDD	SUPPLY VOLTAGE	VDD1	SUPPLY VOLTAGE (3.3 V)	VDD1	SUPPLY VOLTAGE (3.3 V)
P13	-	NOT USED	D1-	DIFFERENTIAL DATA 1-	PCIe RX-	PCIe RX-
P14	CLK	CLOCK	-	NOT USED	-	NOT USED
P15	-	NOT USED	D1+	DIFFERENTIAL DATA 1+	PCIe RX+	PCIe RX+
P16	VSS2	SUPPLY VOLTAGE GROUND	VSS2	SUPPLY VOLTAGE GROUND	VSS2	SUPPLY VOLTAGE GROUND
P17	-	NOT USED	VSS5	SUPPLY VOLTAGE GROUND	VSS5	SUPPLY VOLTAGE GROUND
P18	DAT0	DATA LINE (BIT 0)	RCLK+	RCLK+	REFCLK+	REFCLK+
P19	-	NOT USED	-	NOT USED	VDD3	SUPPLY VOLTAGE (1.2 V)-TBD
P20	DAT1	DATA LINE (BIT 1)	RCLK-	RCLK-	REFCLK-	REFCLK-
P21	WP	WRITE PROTECT	WP	WRITE PROTECT	WP	WRITE PROTECT

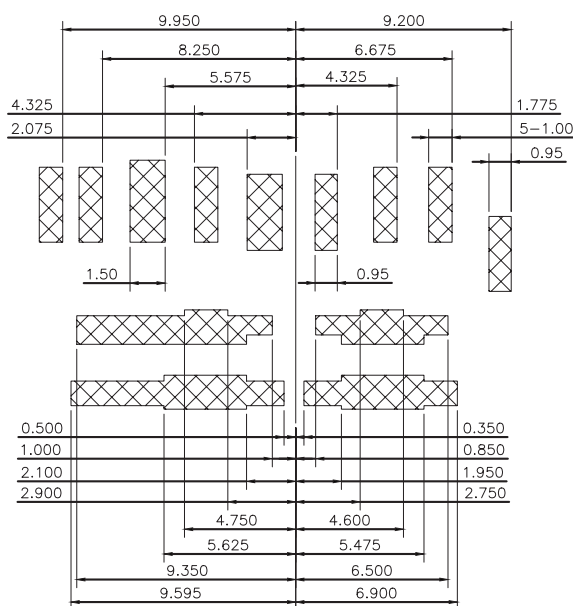
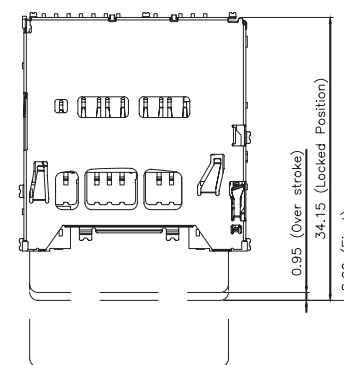


MECHANICAL DRAWING (CONTINUED)

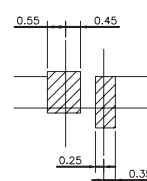
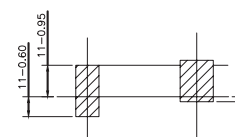
units: mm

PCB tolerance: ± 0.05 mmRecommended PCB Layout
Top View

Recommended ID Dimension

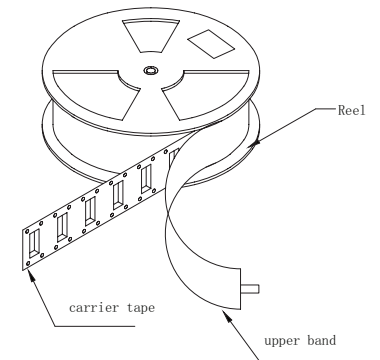
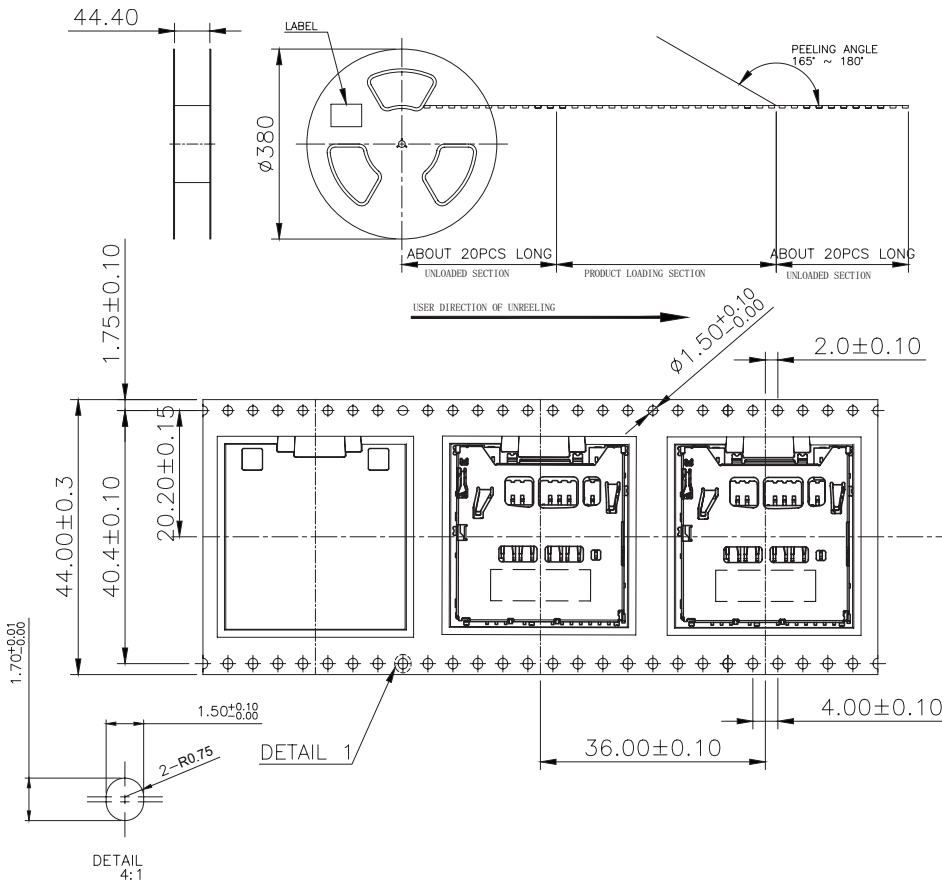
DETAIL J
SCALE 2:1

Card Push State

DETAIL G
SCALE 4:1DETAIL H
SCALE 4:1

PACKAGING

Reel Size: Ø380 mm
Reel QTY: 520 pcs per reel



REVISION HISTORY

rev.	description	date
1.0	initial release	05/13/2025

The revision history provided is for informational purposes only and is believed to be accurate.



Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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