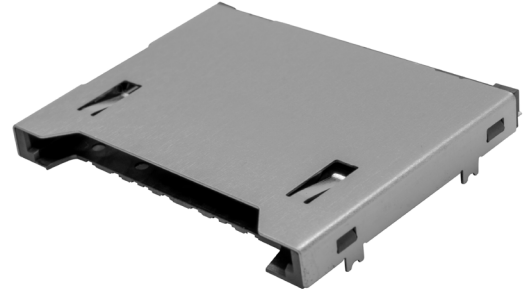


**MODEL:** SD7-1-B | **DESCRIPTION:** SD 7.0 CARD CONNECTOR**FEATURES**

- SD 7.0 card connector
- push in, pull out
- card detect switch
- write protect
- surface mount
- 21 pin
- 2.95 mm profile

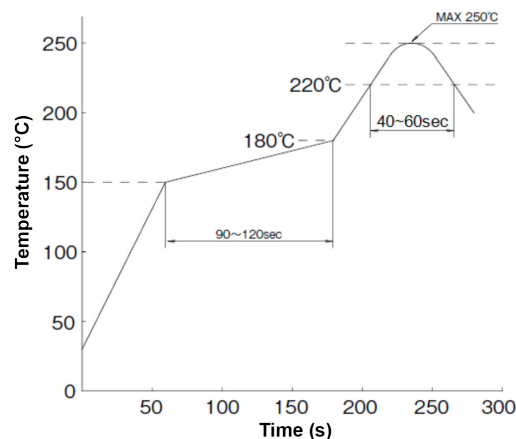
**SPECIFICATIONS**

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.

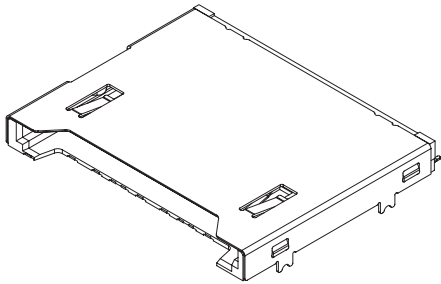
SOLDERABILITY

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

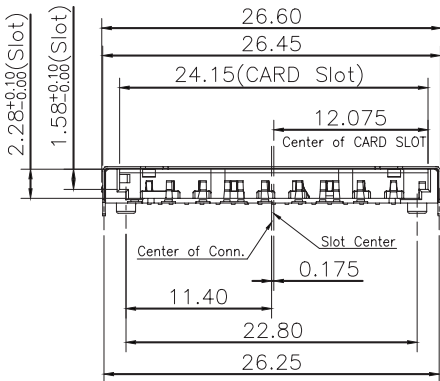
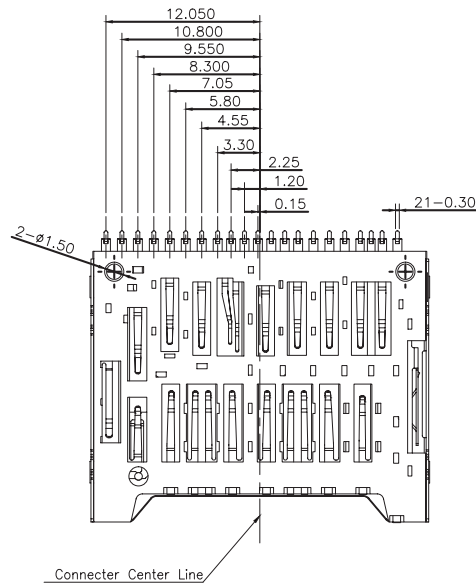
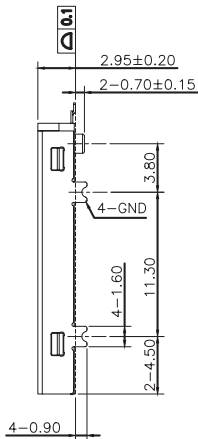
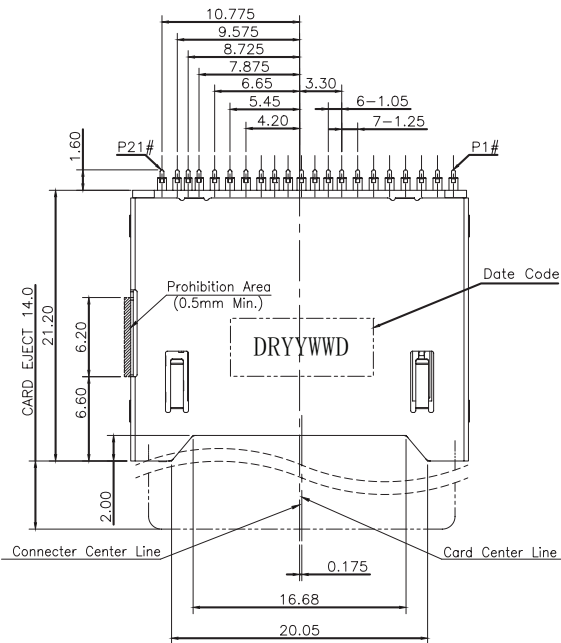


MECHANICAL DRAWING

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

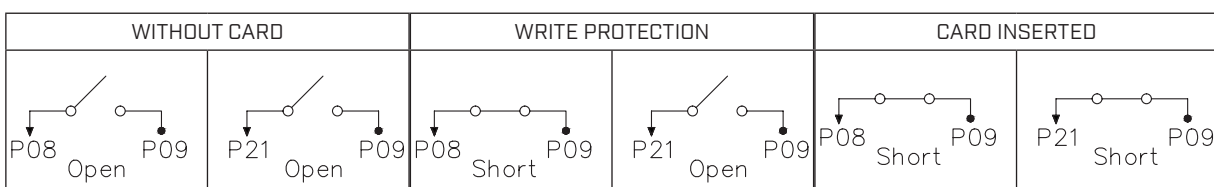


DESCRIPTION	MATERIAL	PLATING/COLOR
housing	LCP [UL94V-0]	black
contact terminals	C5210 t=0.15 mm	contact area: 1 μ " min gold over 50 μ " min nickel solder area: 80 μ " min matte tin over 50 μ " min nickel
cover	SUS304 t=0.20 mm	solder area: 50 μ " min nickel



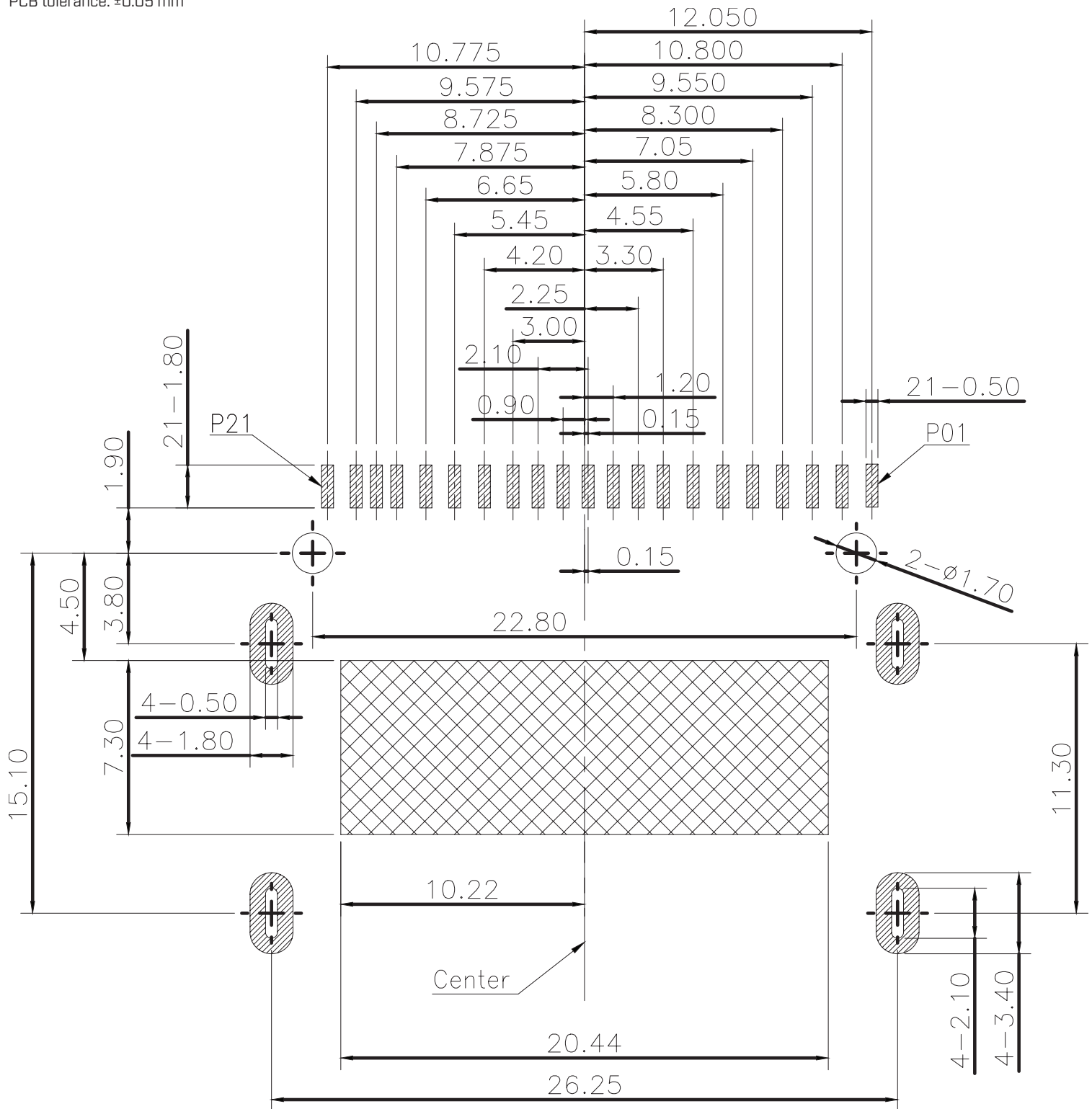
MECHANICAL DRAWING (CONTINUED)

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 mm



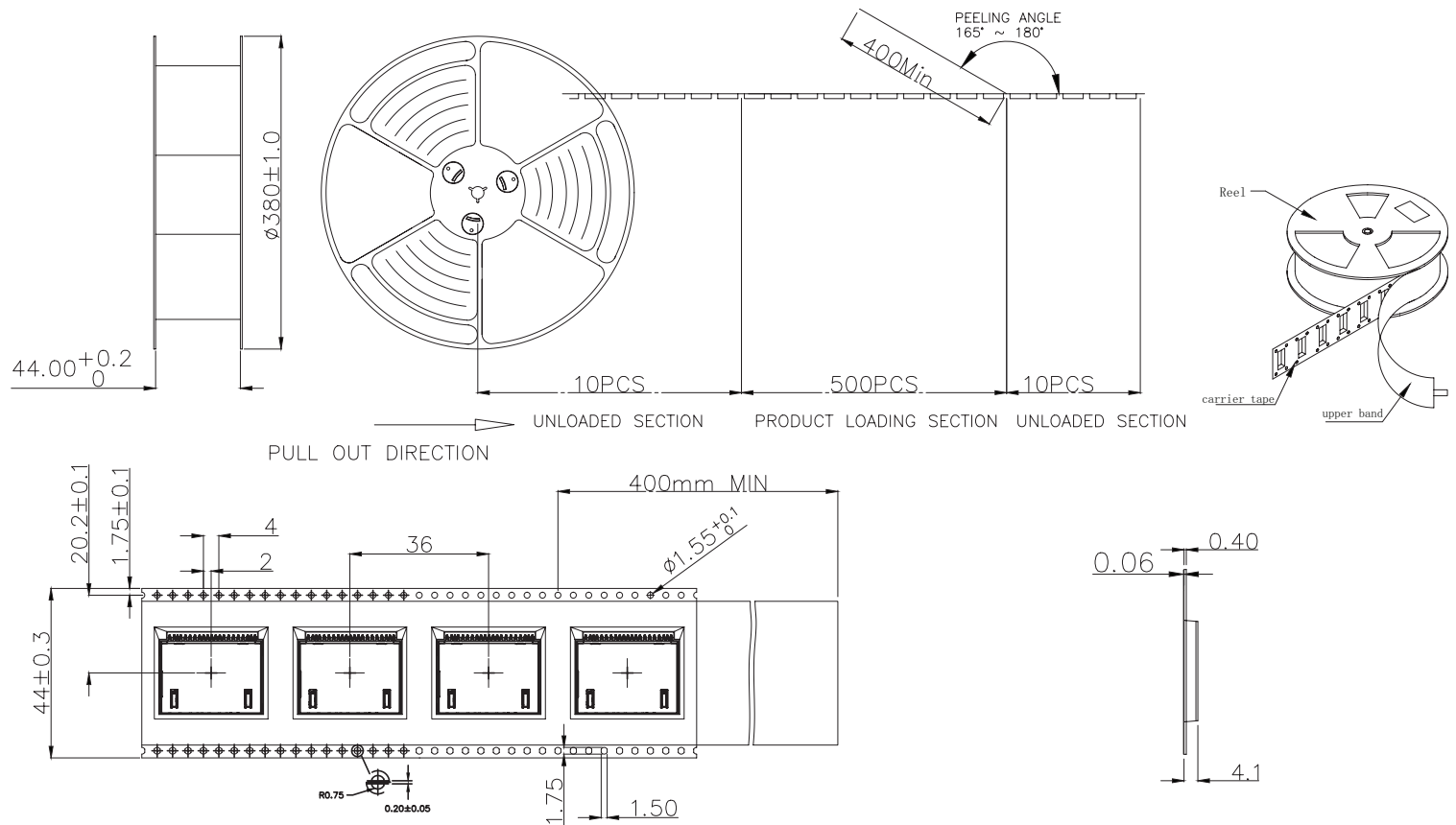
Recommended PCB Layout
Top View

PACKAGING

units: mm

Reel Size: $\varnothing 380$ mm

Reel QTY: 500 pcs per reel



REVISION HISTORY

rev.	description	date
1.0	initial release	05/16/2025

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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Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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