

**MODEL:** SD4-4-B | **DESCRIPTION:** SD 4.0 CARD CONNECTOR**FEATURES**

- SD 4.0 card connector
- push in, pull out
- card detect switch
- gold flash
- surface mount
- UL94V-0

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
rated voltage				30	V
rated current				0.5	A
contact resistance <sup>1</sup>				100	mΩ
insulation resistance	at 500 Vdc, between adjacent circuits	1,000			MΩ
voltage withstand	for 1 minute, between adjacent circuits		100		Vac
insertion force	at a rate of 25 mm/min			10	N
withdrawal force	at a rate of 25 mm/min	0.5			N
life			5,000		cycles
operating temperature		-40		85	°C
flammability rating	UL94V-0				
RoHS	yes				

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

**SOLDERABILITY**

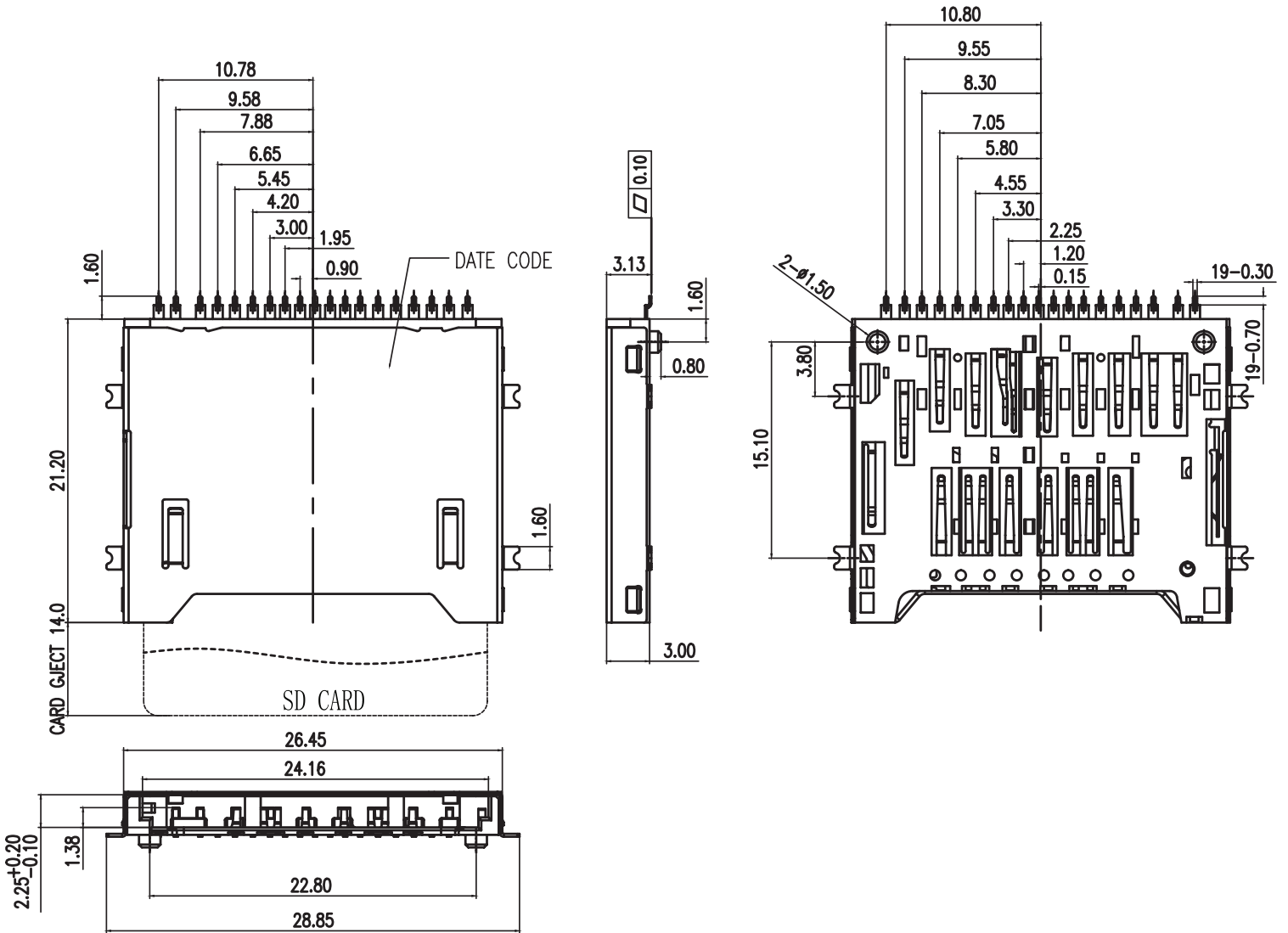
parameter	conditions/description	min	typ	max	units
reel storage	at relative humidity 40-70% reel opened: use within 1 month reel unopened: up to 15 month shelf life	16	22	28	°C
reflow soldering	see reflow profile			250	°C



## MECHANICAL DRAWING

units: mm  
 tolerance:  
 X.X ±0.30 mm  
 X.XX ±0.20 mm  
 X.XXX ±0.10 mm  
 unless otherwise specified

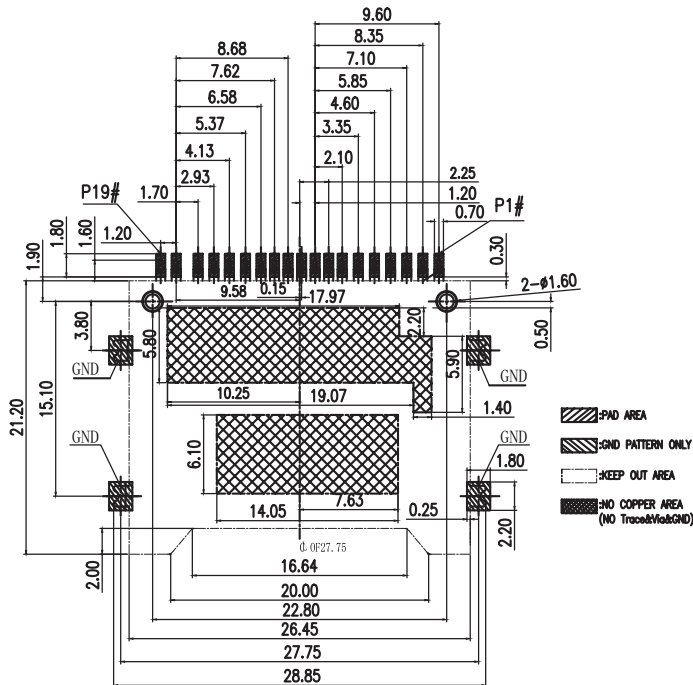
DESCRIPTION	MATERIAL	PLATING/COLOR
housing	LCP 30% GF (UL94V-0)	black
contact terminals	phosphor bronze t=0.15 mm	contact area: gold flash over nickel solder area: matte tin over nickel
cover	SUS304 t=0.20 mm	gold flash over nickel



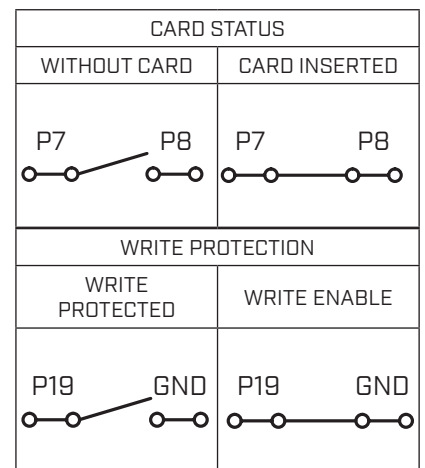
## MECHANICAL DRAWING (CONTINUED)

units: mm  
PCB tolerance: ±0.05 mm

PIN CONNECTIONS							
CONNECTOR PIN#	SD CARD PIN#	SD MODE			UHS-II MODE		
		SIGNAL NAME	TYPE	DESCRIPTION	SIGNAL NAME	TYPE	DESCRIPTION
P1	10	-	-	NOT USED	VSS3	S	SUPPLY VOLTAGE GROUND
P2	9	DAT2	I/O/PP	DATA LINE (BIT 2)	-	-	NOT USED
P3	11	-	-	NOT USED	DO+	LVDS	DO+
P4	1	CD/DAT3	I/O/PP	CARD DETECT/DATA LINE (BIT 3)	-	-	NOT USED
P5	12	-	-	NOT USED	DO-	LVDS	DO-
P6	2	CMD	PP	COMMAND/RESPONSE	-	-	NOT USED
P7	CD	CD	-	CARD DETECT SWITCH	CD	-	CARD DETECT SWITCH
P8	3	VSS1	S	SUPPLY VOLTAGE GROUND	VSS1	S	SUPPLY VOLTAGE GROUND
P9	13	-	-	NOT USED	VSS4	S	SUPPLY VOLTAGE GROUND
P10	14	-	-	NOT USED	VDD2	S	SUPPLY VOLTAGE (1.8 V)
P11	4	VDD	S	SUPPLY VOLTAGE	VDD1	S	SUPPLY VOLTAGE (3.3 V)
P12	15	-	-	NOT USED	D1-	LVDS	D1-
P13	5	CLK	I	CLOCK	-	-	NOT USED
P14	16	-	-	NOT USED	D1+	LVDS	D1+
P15	6	VSS2	S	SUPPLY VOLTAGE GROUND	VSS2	S	SUPPLY VOLTAGE GROUND
P16	17	-	-	NOT USED	VSS5	S	SUPPLY VOLTAGE GROUND
P17	7	DAT0	I/O/PP	DATA LINE (BIT 0)	RCLK+	I	RCLK+
P18	8	DAT1	I/O/PP	DATA LINE (BIT 1)	RCLK-	I	RCLK-
P19	WP	WP	-	WRITE PROTECT	WP	-	WRITE PROTECT
GND	-	-	-	COVER GROUND	-	-	COVER GROUND



Recommended PCB Layout  
Top View

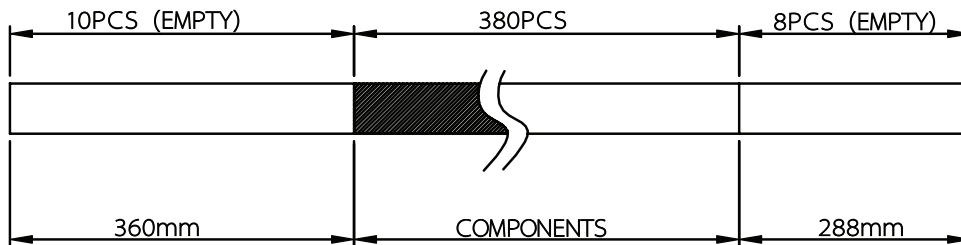
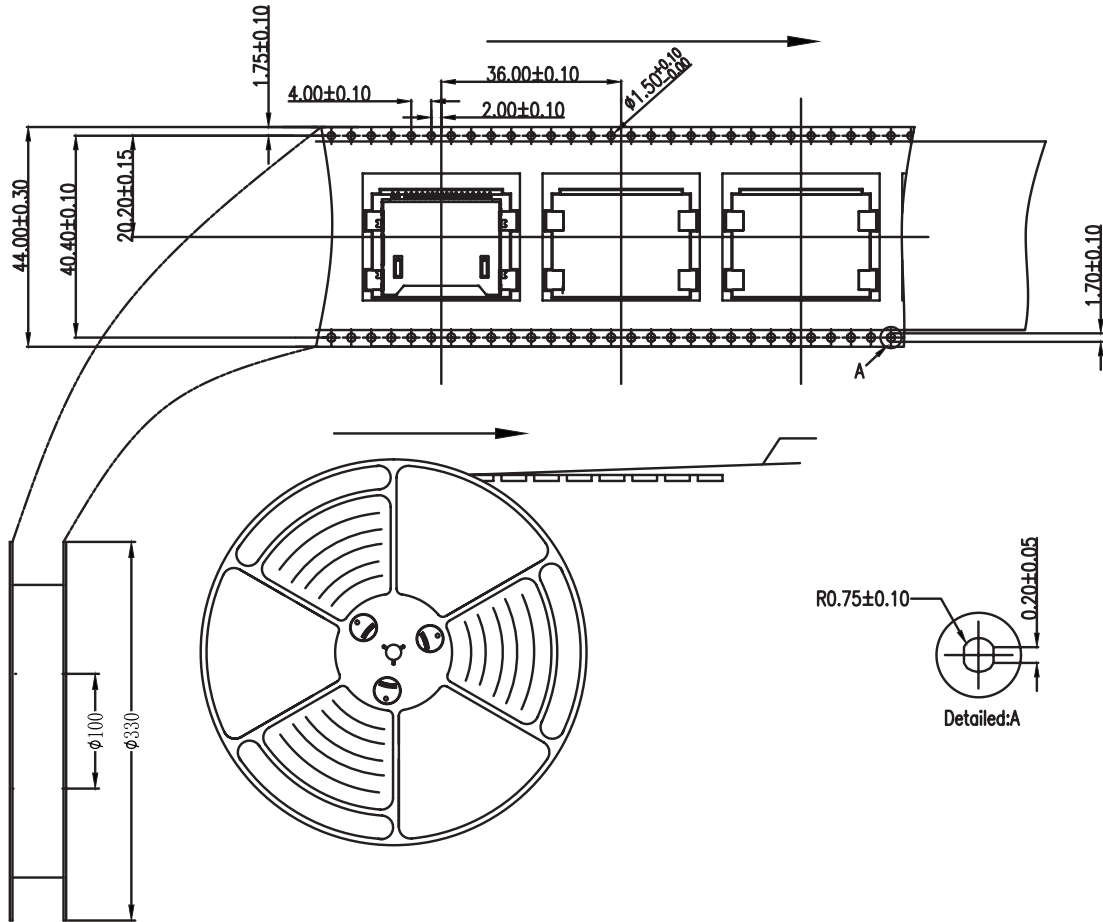


## PACKAGING

units: mm

Reel Size:  $\varnothing 330$  mm

Reel QTY: 380 pcs per reel



## REVISION HISTORY

rev.	description	date
1.0	initial release	10/26/2023

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



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