

**MODEL:** MSD4-1-A | **DESCRIPTION:** MICRO SD 4.0 CARD CONNECTOR**FEATURES**

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

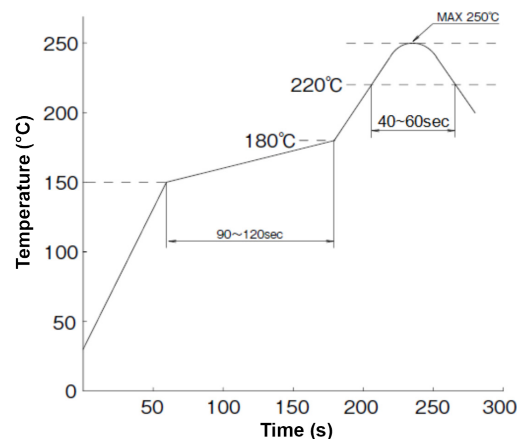
**SPECIFICATIONS**

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.

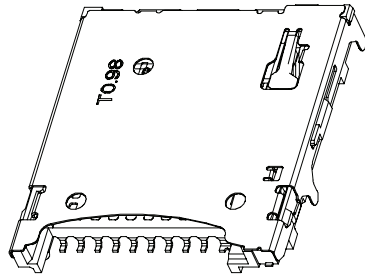
**SOLDERABILITY**

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

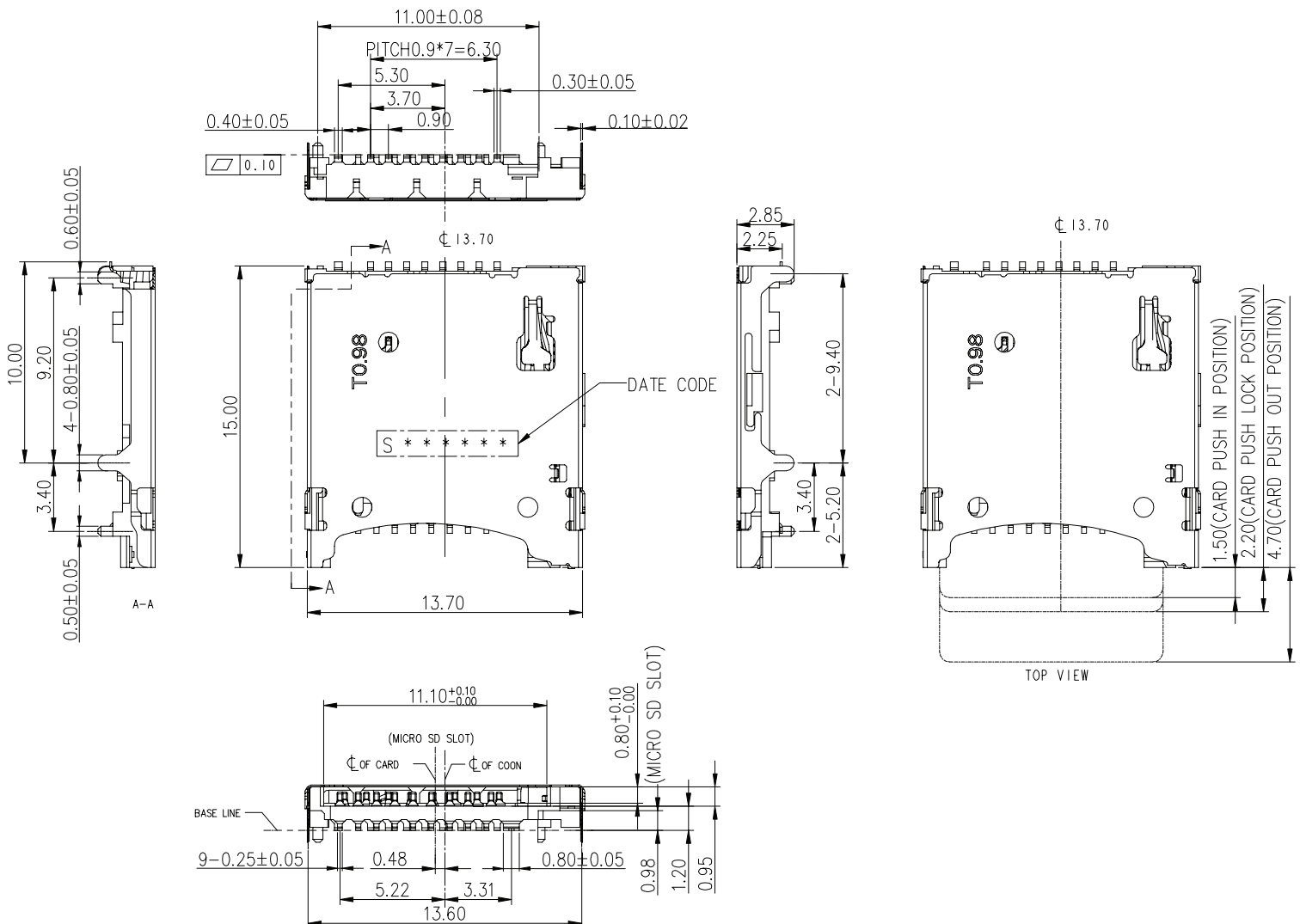


## MECHANICAL DRAWING

units: mm  
 tolerance:  
 X.X  $\pm 0.38$  mm  
 X.XX  $\pm 0.25$  mm  
 X.XXX  $\pm 0.10$  mm  
 unless otherwise specified



DESCRIPTION	MATERIAL	PLATING/COLOR
housing	LCP [UL94V-0]	black
contact terminals	phosphor bronze t=0.10 mm	contact area: gold over nickel solder area: tin over nickel
cover	SUS304 t=0.10 mm	nickel

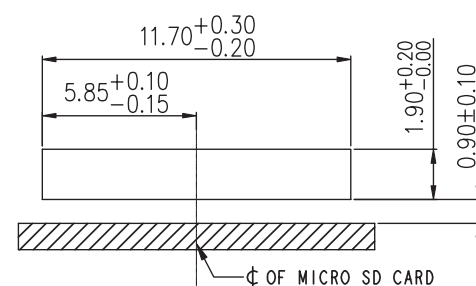
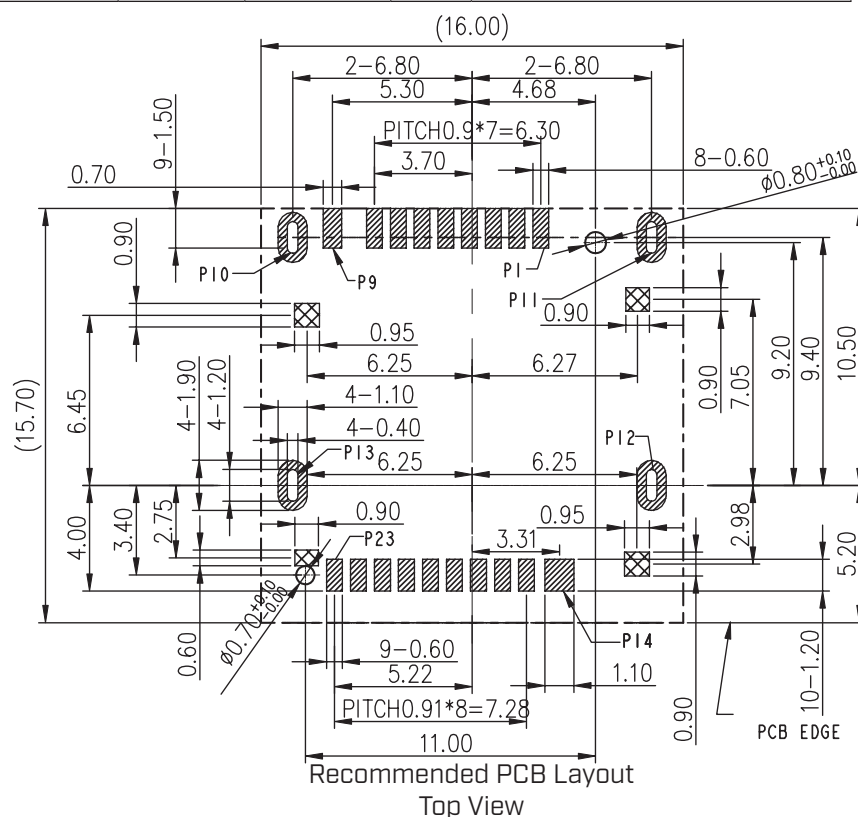


## MECHANICAL DRAWING (CONTINUED)

units: mm  
PCB tolerance:  $\pm 0.05$  mm

PIN CONNECTIONS				
CONNECTOR PIN#	MSD CARD PIN#	SIGNAL NAME	TYPE	DESCRIPTION
P1	1	DAT2	I/O	DATA LINE [BIT 2]
P2	2	CD/DAT3	I/O	CARD DETECT/DATA LINE [BIT 3]
P3	3	CMD	I/O	COMMAND/RESPONSE
P4	4	VDD1	S	SUPPLY VOLTAGE [3.3 V]
P5	5	CLK	I	CLOCK
P6	6	VSS	S	SUPPLY VOLTAGE GROUND
P7	7	DAT0/RCLK+	I/O	DATA LINE [BIT 0]/RCLK+
P8	8	DAT1/RCLK+	I/O	DATA LINE [BIT 1]/RCLK-
P9	CD	CD	-	CARD DETECT SWITCH
P10~P14	GND	-	-	COVER GROUND
P15	9	VDD2	S	SUPPLY VOLTAGE [1.8 V]
P16	17	SWIO	I	SINGLE WIRE PROTOCOL INTERFACE
P17	10	VSS	S	SUPPLY VOLTAGE GROUND
P18	11	DO+	I/O	UHS-II DO+
P19	12	DO-	I/O	UHS-II DO-
P20	13	VSS	S	SUPPLY VOLTAGE GROUND
P21	14	D1-	I/O	UHS-II D1-
P22	15	D1+	I/O	UHS-II D1+
P23	16	VSS	S	SUPPLY VOLTAGE GROUND

CARD STATUS		
WITHOUT CARD	HALF INSERTION	CARD INSERTED

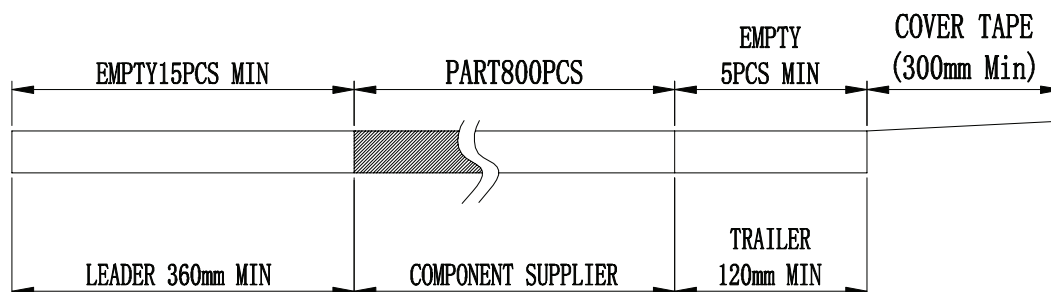
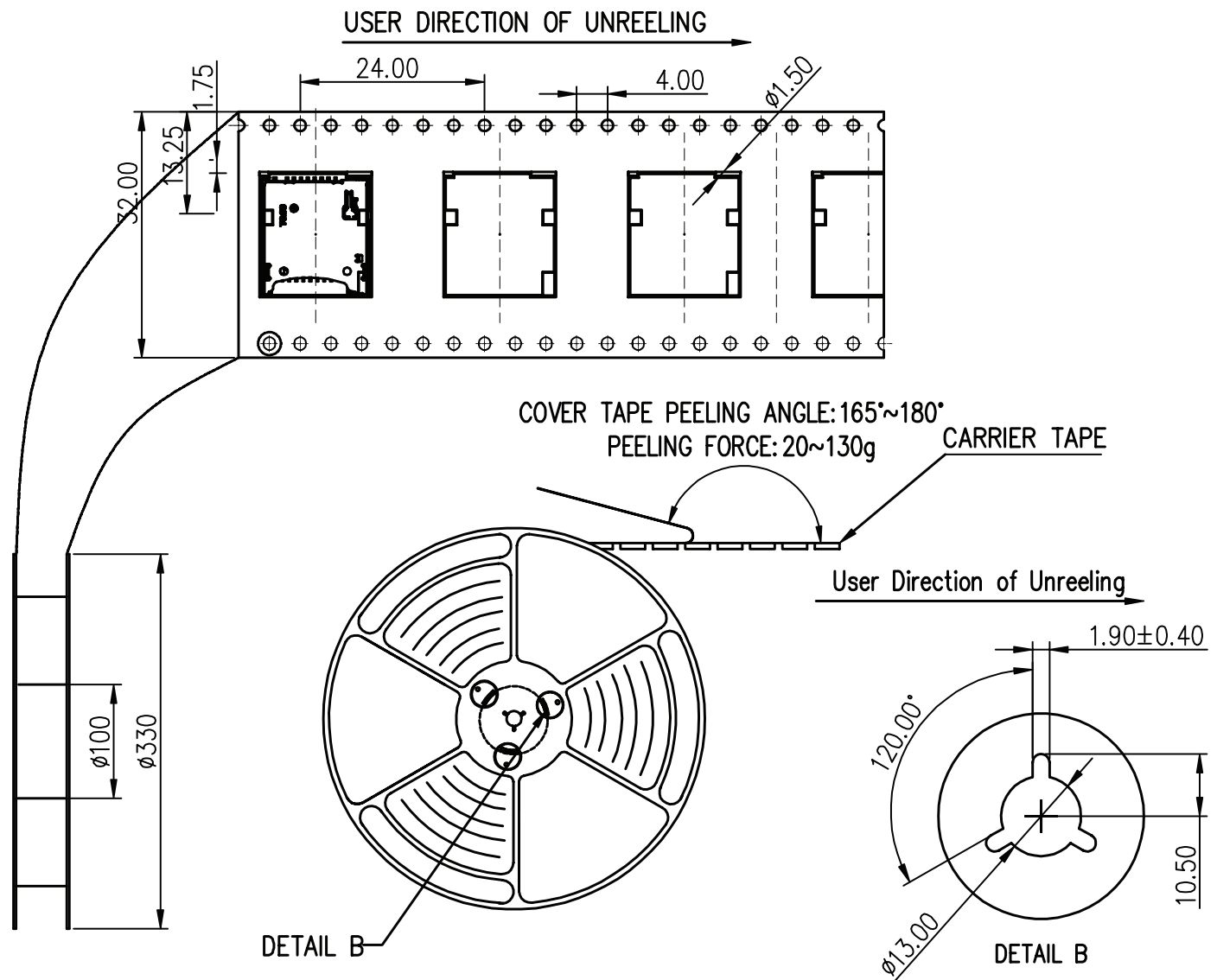


## PACKAGING

units: mm

Reel Size:  $\varnothing 330$  mm

Reel QTY: 800 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.



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

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