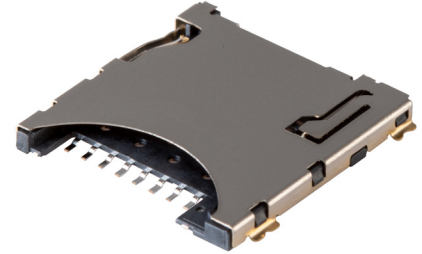


**MODEL:** MSD-12-A | **DESCRIPTION:** MICRO SD CARD CONNECTOR

**FEATURES**

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

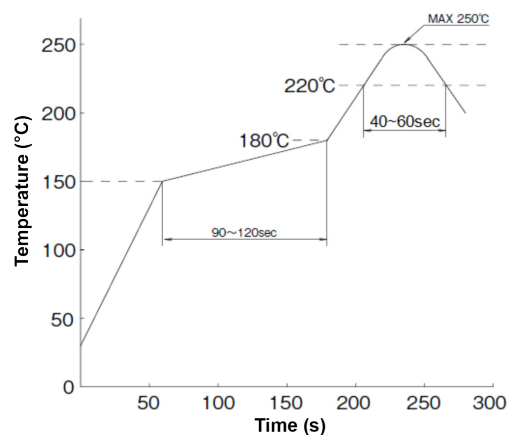

**SPECIFICATIONS**

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		500		Vdc
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		-45		75	°C
flammability rating	UL94V-0				
RoHS	yes				

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

**SOLDERABILITY**

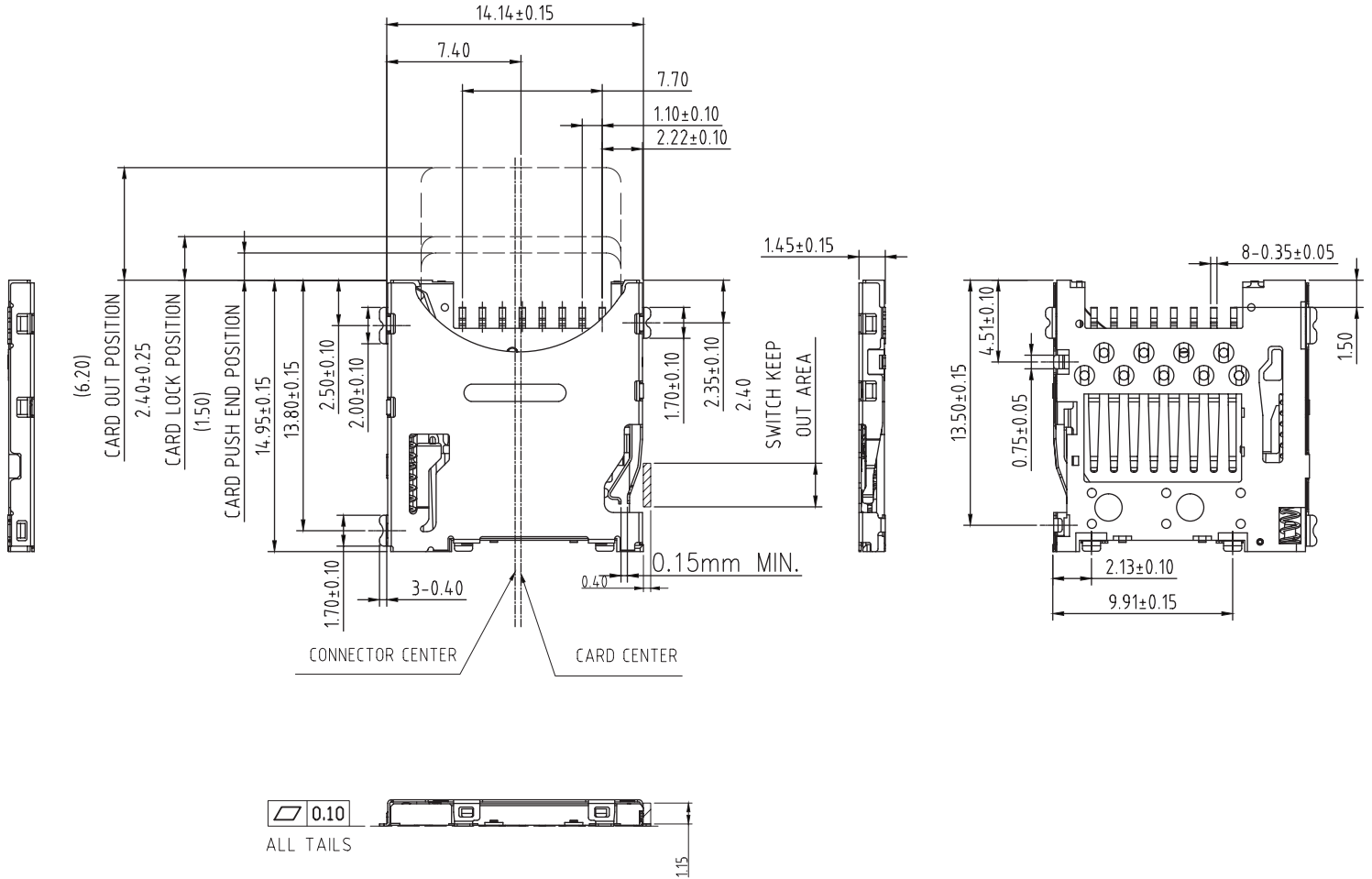
parameter	conditions/description	min	typ	max	units
reel storage	at relative humidity 40-70% reel opened: use within 1 month reel unopened: up to 15 month shelf life	16	22	28	°C
reflow soldering	see reflow profile			250	°C



## MECHANICAL DRAWING

units: mm  
 tolerance:  
 X.X ±0.38 mm  
 X.XX ±0.25 mm  
 X.XXX ±0.15 mm  
 unless otherwise specified

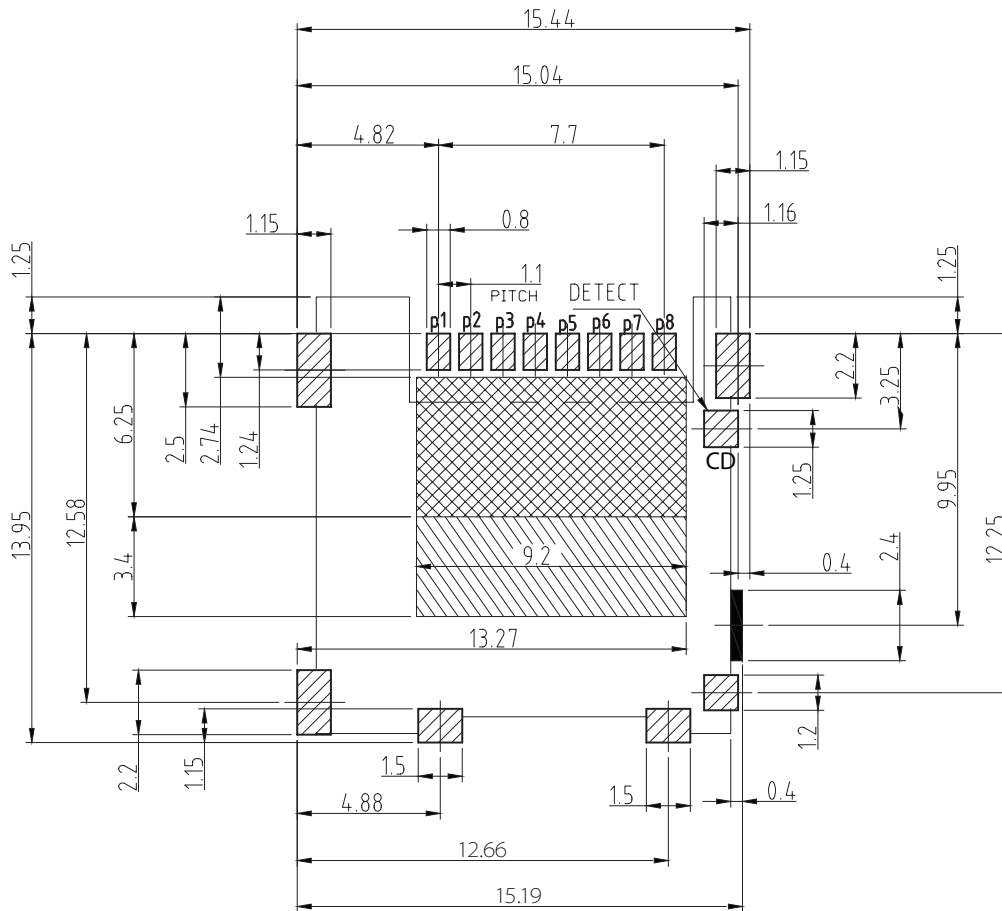
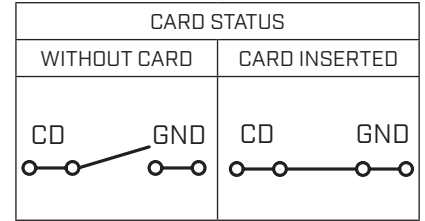
DESCRIPTION	MATERIAL	PLATING/COLOR
housing	LCP (UL94-0)	black
contact terminals	phosphor bronze t=0.12 mm	contact area: gold flash over nickel solder area: tin over nickel
cover	SUS304 t=0.12 mm	solder area: gold flash over nickel



## MECHANICAL DRAWING (CONTINUED)

units: mm  
PCB tolerance: ±0.05 mm

PIN CONNECTIONS			
PIN	SIGNAL NAME	TYPE	DESCRIPTION
1	DAT2	I/O/PP	DATA LINE [BIT 2]
2	CD/DAT3	I/O/PP	CARD DETECT / DATA LINE [BIT 3]
3	CMD	PP	COMMAND / RESPONSE
4	VDD	S	SUPPLY VOLTAGE
5	CLK	I	CLOCK
6	VSS	S	SUPPLY VOLTAGE GROUND
7	DAT0	I/O/PP	DATA LINE [BIT 0]
8	DAT1	I/O/PP	DATA LINE [BIT 1]
CD	-	-	CARD DETECT SWITCH
GND	-	-	COVER GROUND



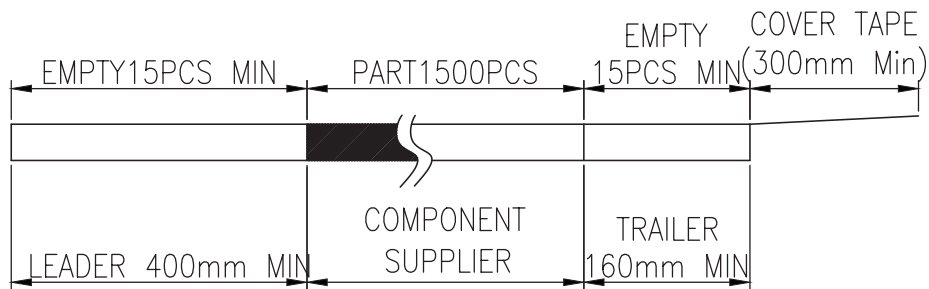
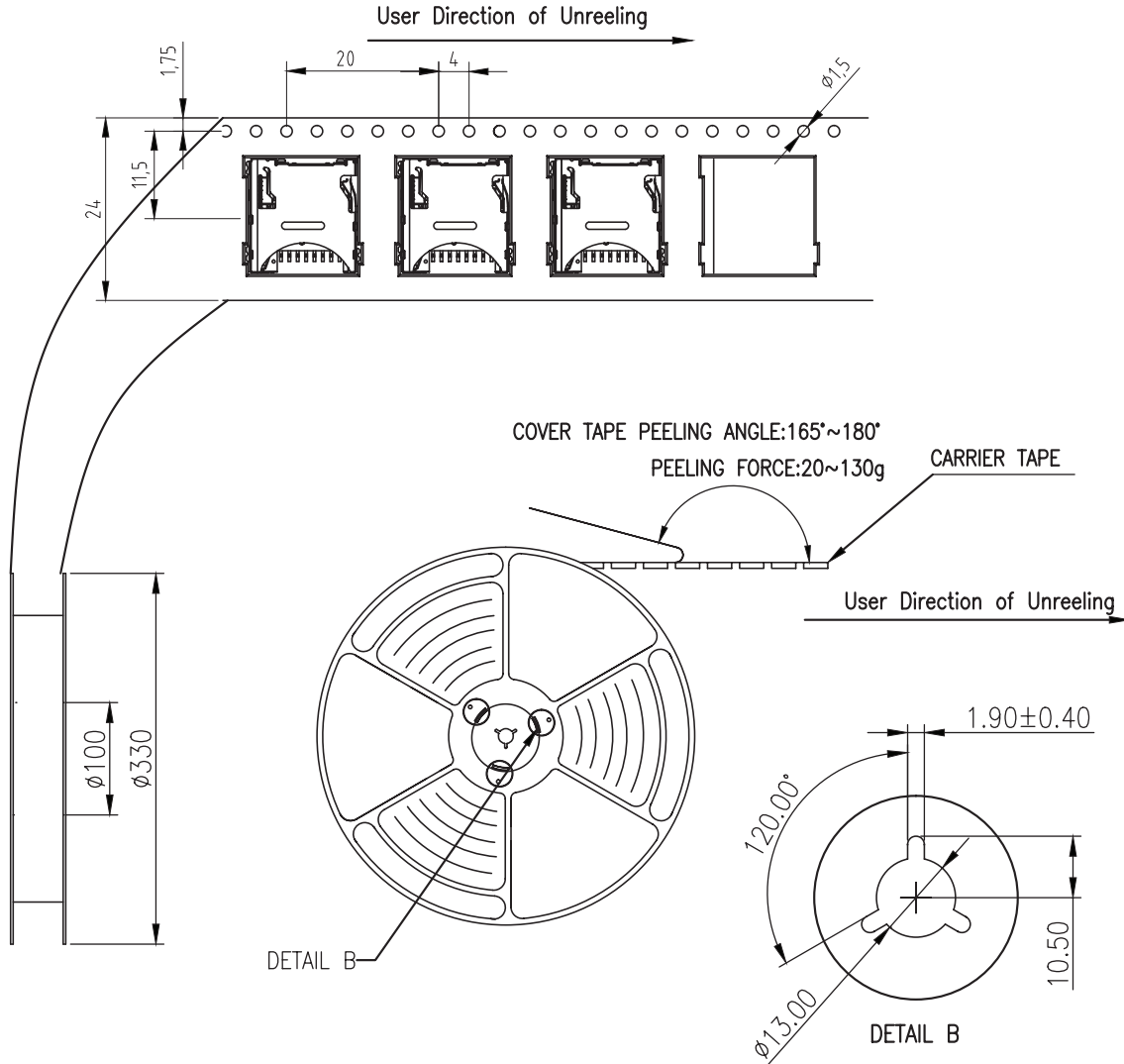
SOLDER PROHIBITED AREA   
 PROHIBITED AREA   
 PATTERN PROHIBITED AREA

Recommended PCB Layout  
Top View

## PACKAGING

units: mm

Reel Size:  $\varnothing 330$  mm  
 Reel QTY: 1,500 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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