

MODEL: SD-5-B | **DESCRIPTION:** SD CARD CONNECTOR**FEATURES**

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

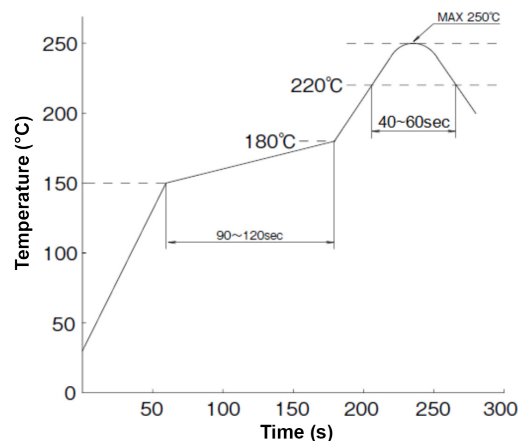
**SPECIFICATIONS**

| 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 | | 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.

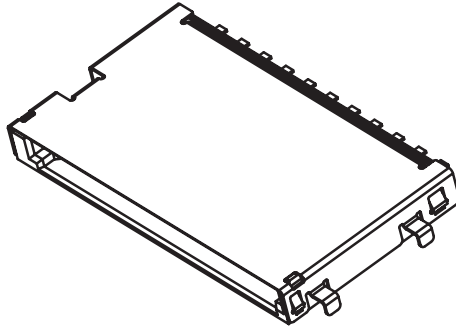
SOLDERABILITY

| 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 |

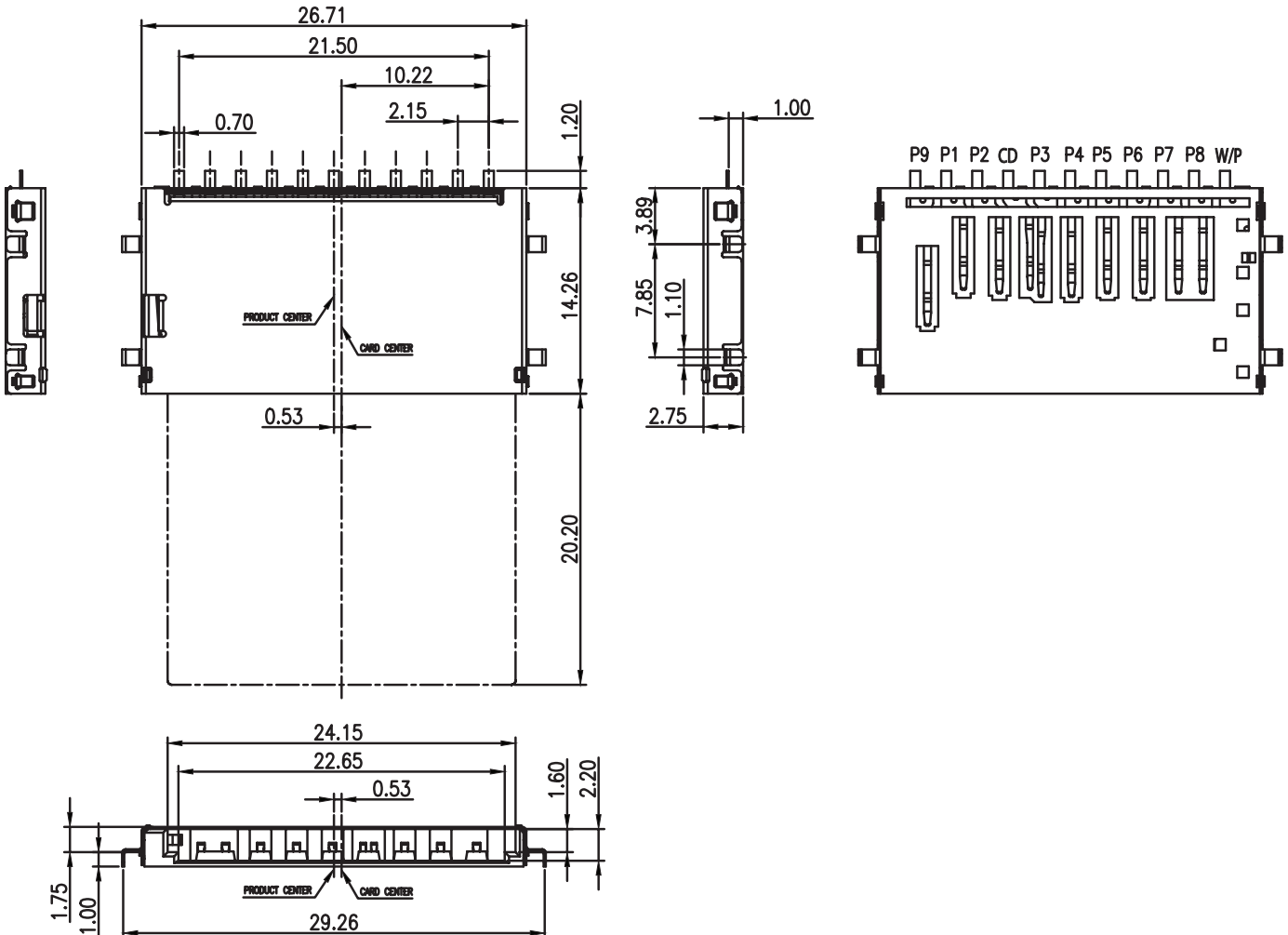


MECHANICAL DRAWING

units: mm
 tolerance:
 X.X ±0.38 mm
 X.XX ±0.25 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: tin over nickel |
| cover | SUS304 t=0.15 mm | nickel |

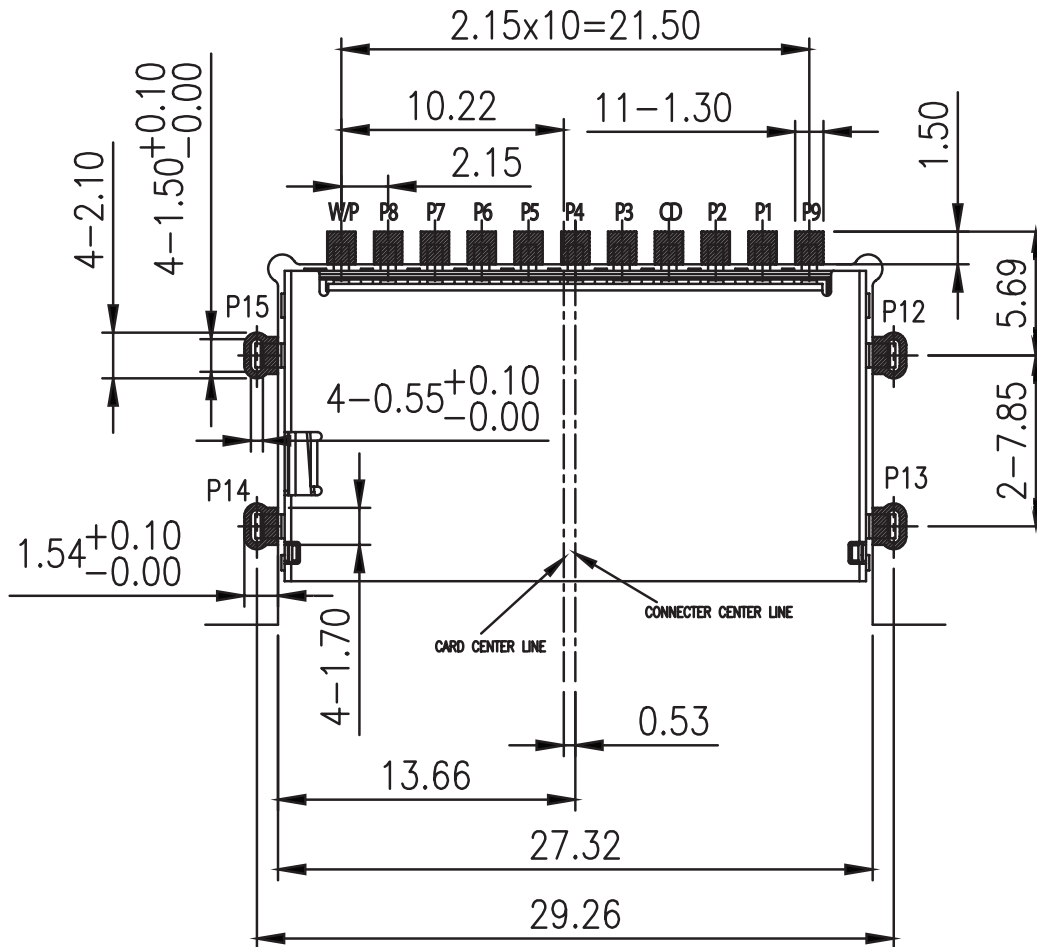


MECHANICAL DRAWING (CONTINUED)

units: mm
PCB tolerance: ±0.05 mm

| PIN CONNECTIONS | | | |
|-----------------|-------------|--------|-------------------------------|
| PIN | SIGNAL NAME | TYPE | DESCRIPTION |
| 1 | CD/DAT3 | I/O/PP | CARD DETECT/DATA LINE (BIT 3) |
| 2 | CMD | PP | COMMAND/RESPONSE |
| 3 | VSS1 | S | SUPPLY VOLTAGE GROUND |
| 4 | VDD | S | SUPPLY VOLTAGE |
| 5 | CLK | I | CLOCK |
| 6 | VSS2 | S | SUPPLY VOLTAGE GROUND |
| 7 | DAT0 | I/O/PP | DATA LINE (BIT 0) |
| 8 | DAT1 | I/O/PP | DATA LINE (BIT 1) |
| 9 | DAT2 | I/O/PP | DATA LINE (BIT 2) |
| WP | - | - | WRITE PROTECT |
| CD | - | - | CARD DETECT SWITCH |
| GND | - | - | COVER GROUND |

| CARD STATUS | | |
|--------------|--|--|
| WITHOUT CARD | CARD INSERTED WRITE PROTECT LOCK | CARD INSERTED WRITE PROTECT UNLOCK |
| | | |



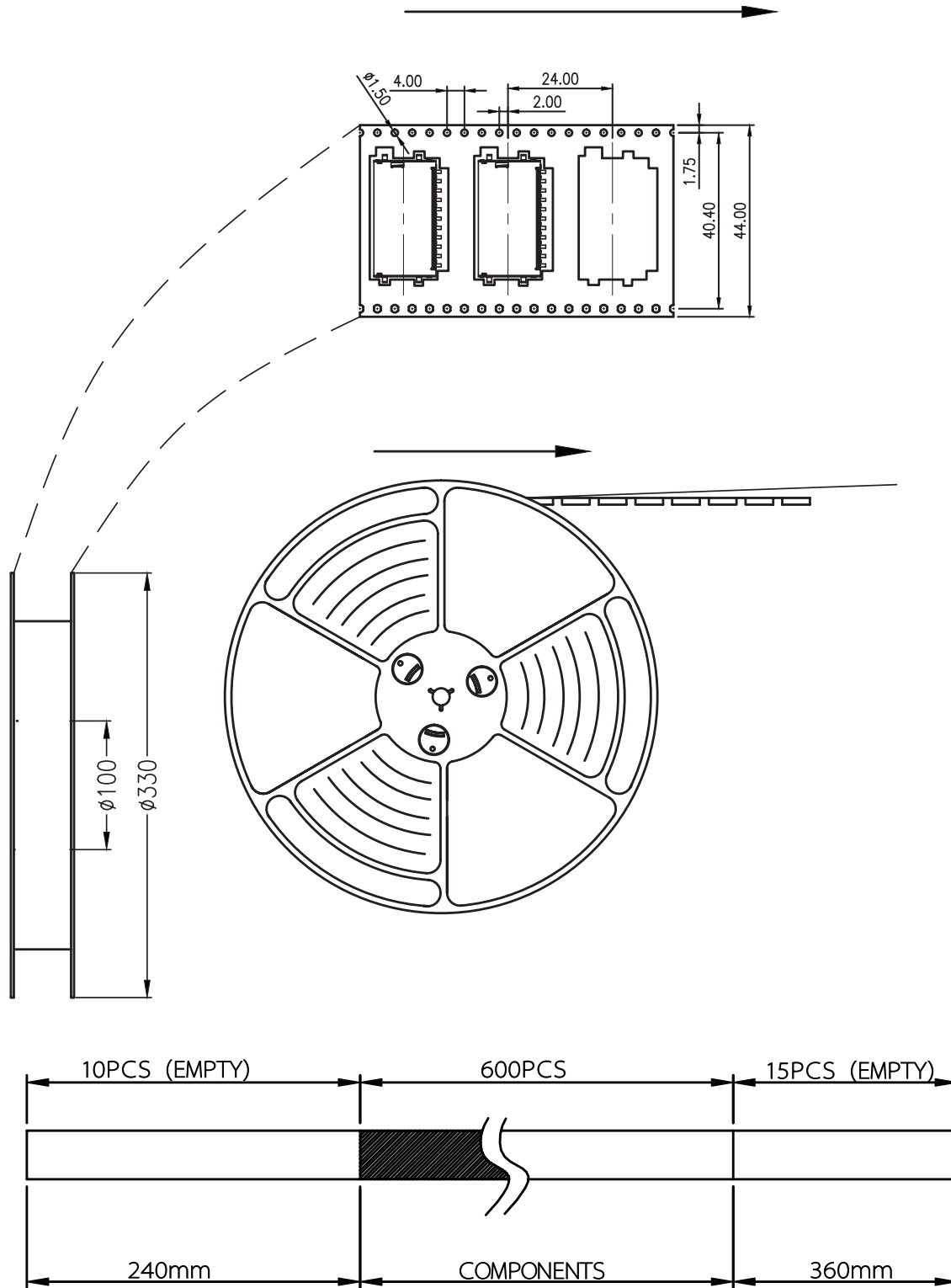
Recommended PCB Layout
Top View

PACKAGING

units: mm

Reel Size: $\varnothing 330$ mm

Reel QTY: 600 pcs per reel



REVISION HISTORY

| rev. | description | date |
|------|-----------------|------------|
| 1.0 | initial release | 10/24/2023 |

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



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