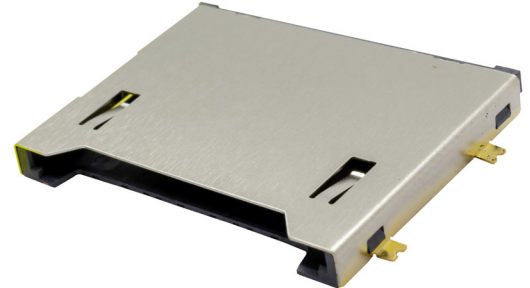


**MODEL:** SD7-3-B | **DESCRIPTION:** SD 7.0 CARD CONNECTOR**FEATURES**

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

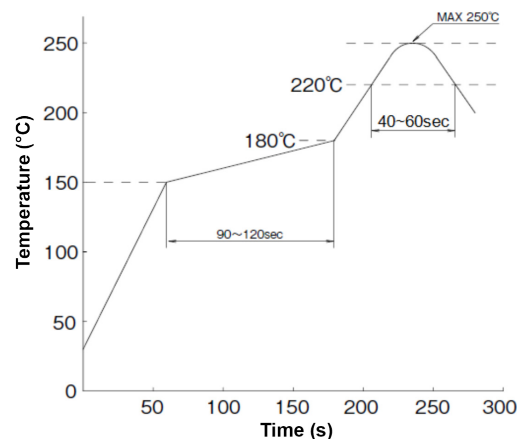
**SPECIFICATIONS**

| 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   |     | 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.

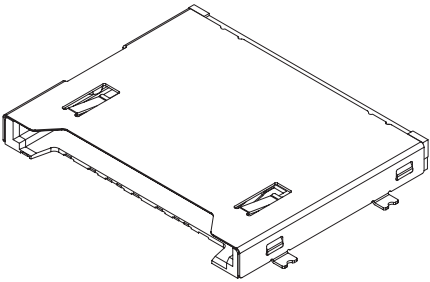
**SOLDERABILITY**

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

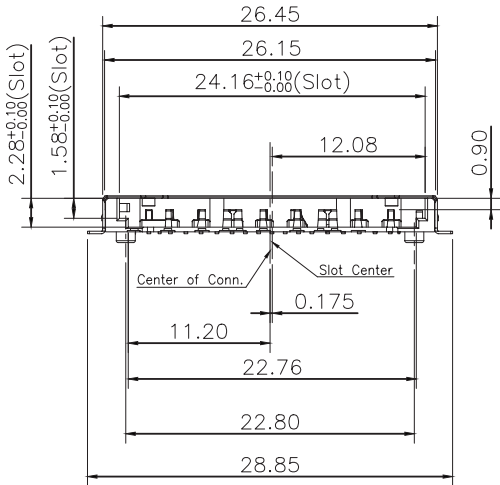
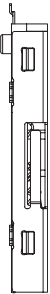
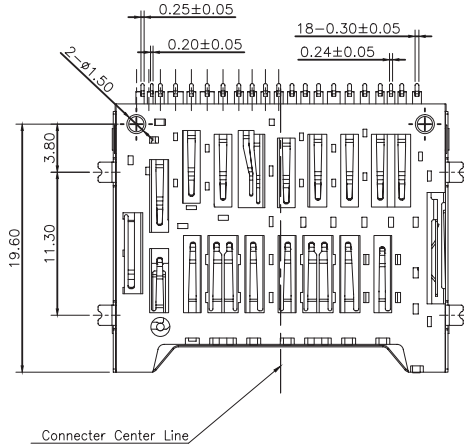
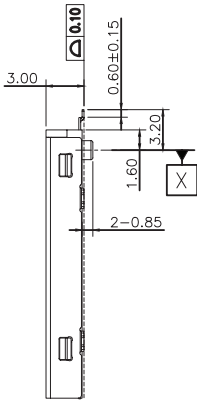
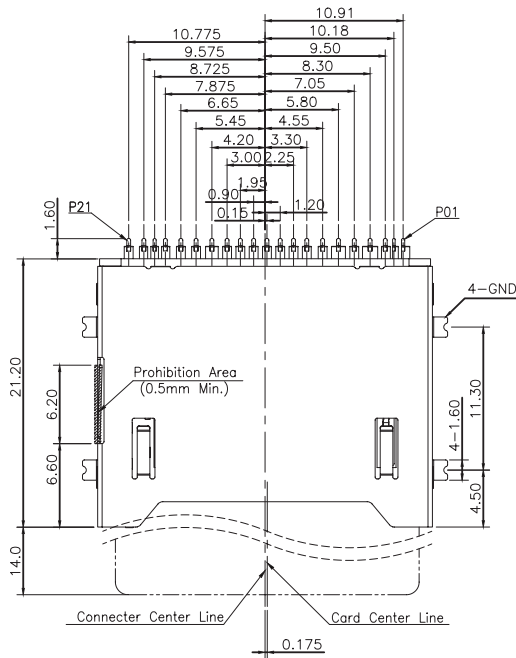


MECHANICAL DRAWING

units: mm  
tolerance:  
X.X  $\pm 0.35$  mm  
X.XX  $\pm 0.20$  mm  
X.XXX  $\pm 0.10$  mm  
unless otherwise specified

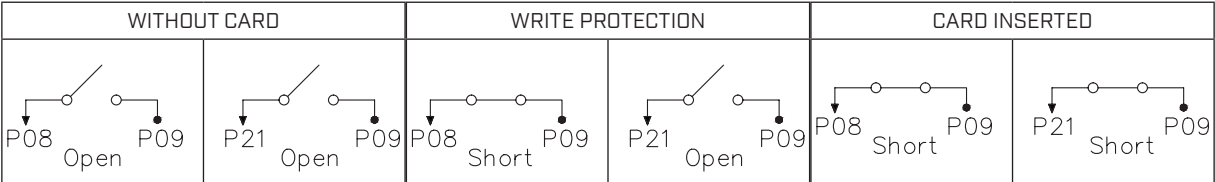


| DESCRIPTION       | MATERIAL           | PLATING/COLOR                                                                                                                                |
|-------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| housing           | LCP [UL94V-0]      | black                                                                                                                                        |
| contact terminals | C5210<br>t=0.15 mm | contact area: 1 $\mu$ "<br>min gold over 50 $\mu$ "<br>min nickel<br>solder area: 100 $\mu$ "<br>min matte tin over<br>50 $\mu$ " min nickel |
| cover             | SUS304 t=0.20 mm   | solder area: 50 $\mu$ "<br>min nickel                                                                                                        |



**MECHANICAL DRAWING (CONTINUED)**

| PIN CONNECTIONS   |                |                               |                |                        |                 |                                                                      |
|-------------------|----------------|-------------------------------|----------------|------------------------|-----------------|----------------------------------------------------------------------|
| CONNECTOR<br>PIN# | SD MODE        |                               | UHS-II MODE    |                        | SD EXPRESS MODE |                                                                      |
|                   | SIGNAL<br>NAME | DESCRIPTION                   | SIGNAL<br>NAME | DESCRIPTION            | SIGNAL<br>NAME  | DESCRIPTION                                                          |
| P1                | -              | NOT USED                      | VSS3           | SUPPLY VOLTAGE GROUND  | VSS3            | SUPPLY VOLTAGE GROUND                                                |
| P2                | -              | NOT USED                      | -              | NOT USED               | RESERVED        | RESERVED AREA FOR FUTURE PAD<br>EXTENSION                            |
| P3                | DAT2           | DATA LINE (BIT 2)             | -              | NOT USED               | CLKREQ#         | REFERENCE CLOCK REQUEST<br>SIGNAL. ALSO USED BY L1 PM SUB-<br>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                                                        |



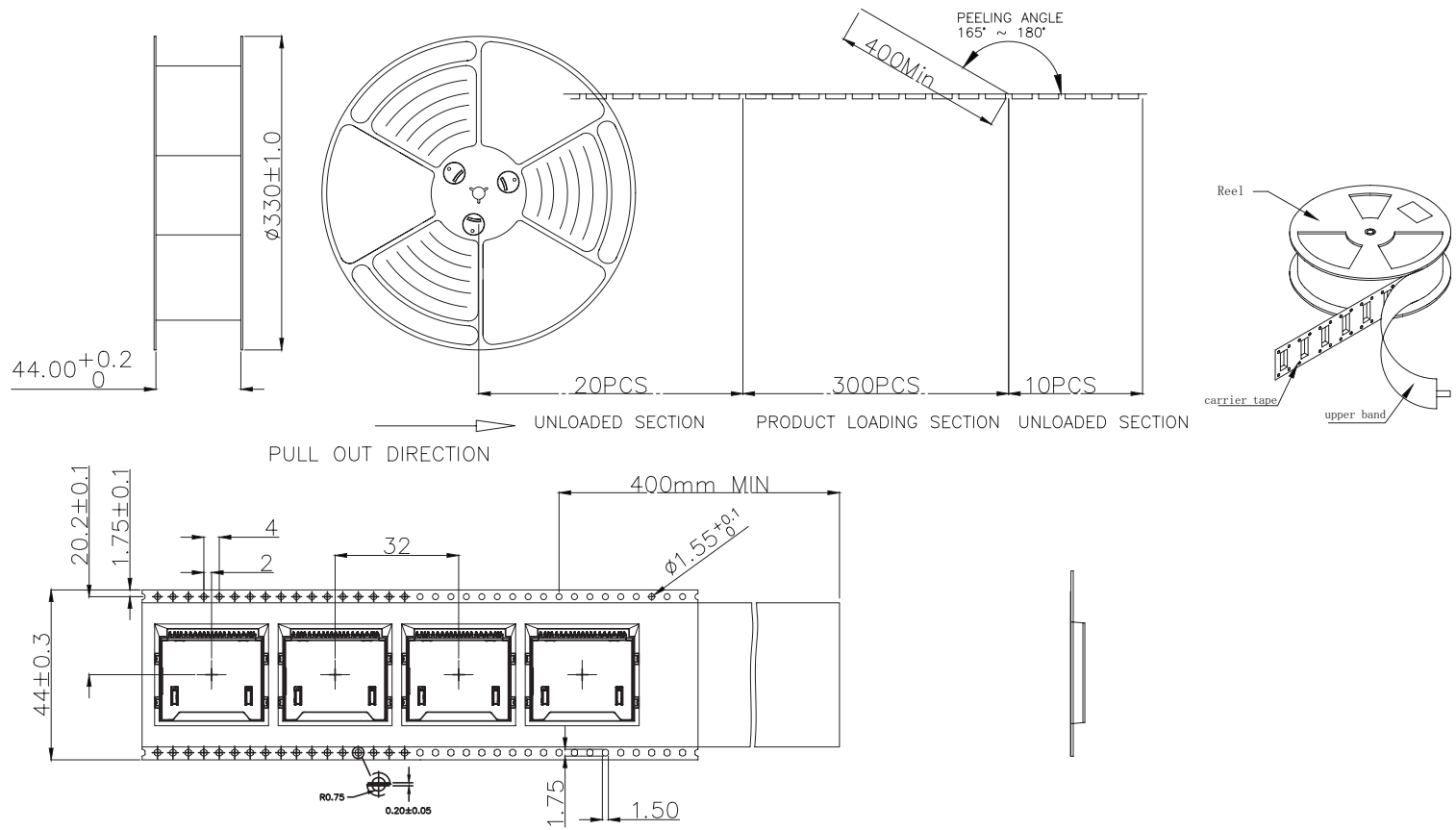


## PACKAGING

units: mm

Reel Size:  $\varnothing 330$  mm

Reel QTY: 300 pcs per reel



REVISION HISTORY

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 05/13/2025 |

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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