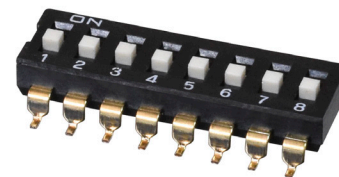


SERIES: DS04-254-SMT | **DESCRIPTION:** DIP SWITCH

FEATURES

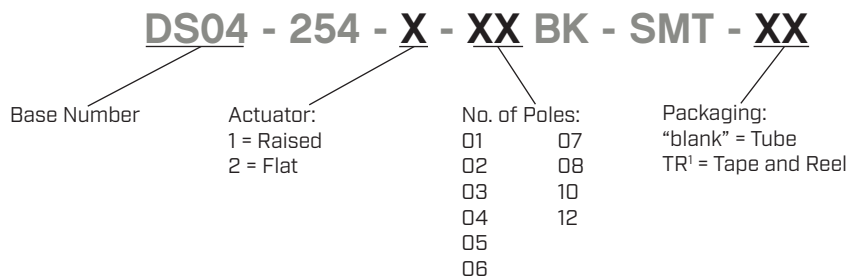
- 2.54 mm pitch
- 1-12 pole options
- raised or flat actuator option
- surface mount
- tube or tape & reel packaging



SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|--------------------------|----------------------------|------|-----|-----------|------------|
| rated voltage (per pole) | switching non-switching | | | 24 50 | Vdc Vdc |
| rated current (per pole) | switching non-switching | | | 25 100 | mA mA |
| withstanding voltage | for 1 minute | | 500 | | Vac |
| contact resistance | initial after life test | | | 50 100 | mΩ mΩ |
| insulation resistance | at 500 Vdc | 100 | | | MΩ |
| operating force | | | | 1000 | g |
| switch travel | | | | 0.9 | mm |
| operating temperature | | -40 | | 85 | °C |
| storage temperature | | -40 | | 85 | °C |
| life | | 2000 | | | cycles |
| flammability rating | UL94V-0 | | | | |
| RoHS | yes | | | | |

PART NUMBER KEY



Notes: 1. Tape and Reel packaging only available on flat actuator options.

MECHANICAL DRAWING

units: mm

tolerance:

0.5<X≤3.0: ±0.15 mm

3.0<X≤6.0: ±0.20 mm

6.0<X≤30.0: ±0.25 mm

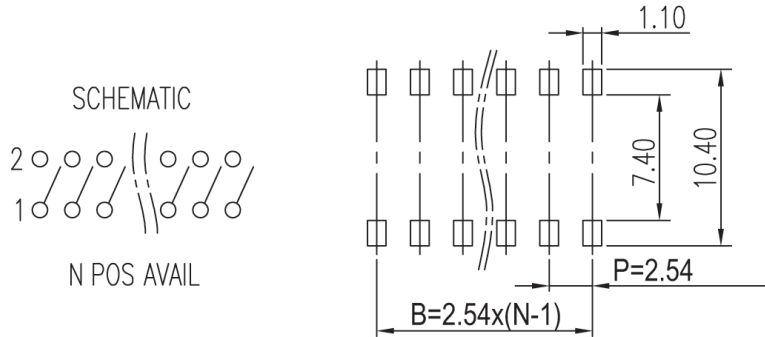
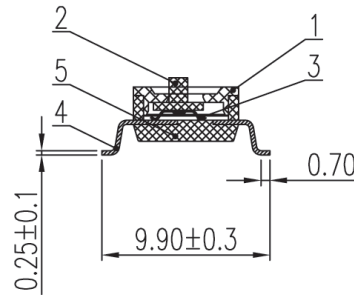
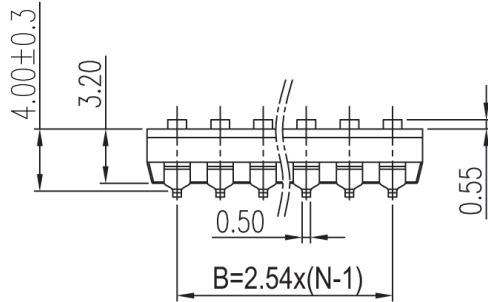
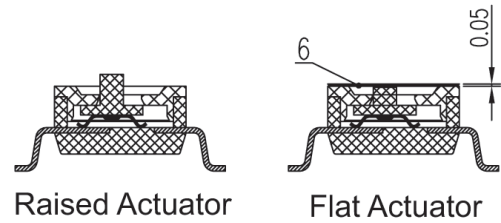
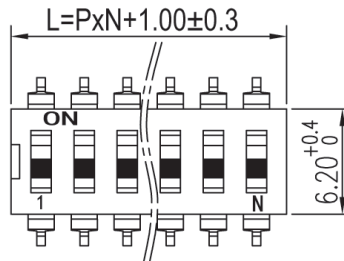
30.0<X≤120.0: ±0.30 mm

120.0<X≤400.0: ±0.50 mm

X>400.0: ±0.80 mm

unless otherwise noted

| ITEM | DESCRIPTION | MATERIAL | PLATING/COLOR |
|------|-------------|---------------|---------------|
| 1 | housing | PBT (UL94V-0) | black |
| 2 | actuator | PBT (UL94V-0) | white |
| 3 | contact | copper alloy | gold |
| 4 | pins 1,2 | copper alloy | gold |
| 5 | base | PBT (UL94V-0) | black |
| 6 | tape | polyimide | |



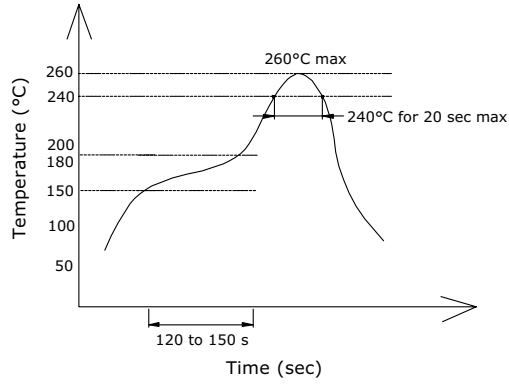
Recommended PCB Layout
Top View

| | | | | | | | | | | |
|---|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| This series is constructed of single piece modules where L is the total length, P is the pitch, and N is the number of poles. | | | | | | | | | | |
| N | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 10 | 12 |
| L | 3.54 | 6.08 | 8.62 | 11.16 | 13.70 | 16.24 | 18.78 | 21.32 | 26.40 | 31.48 |
| B | -- | 2.54 | 5.08 | 7.62 | 10.16 | 12.70 | 15.24 | 17.78 | 22.86 | 27.94 |

SOLDERABILITY

| parameter | conditions/description | min | typ | max | units |
|-------------------------------|-----------------------------|-----|-----|-----|-------|
| hand soldering ² | for maximum 3 seconds | 315 | 320 | 325 | °C |
| reflow soldering ² | 240-260 °C (20 seconds max) | | | 260 | °C |

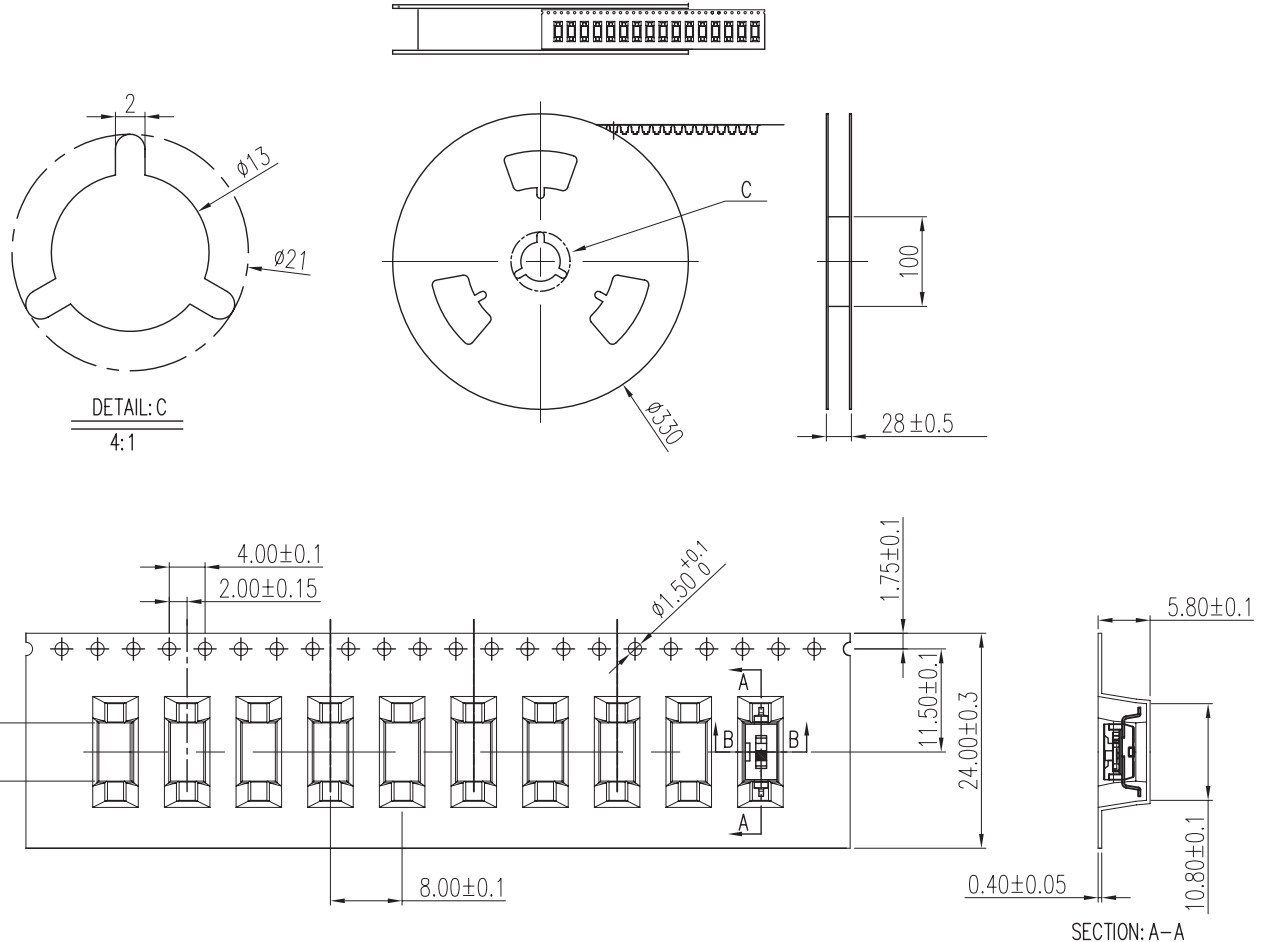
Notes: 2. Keep in "off" position during soldering.



PACKAGING (TAPE & REEL, 1 POLE MODELS)

units: mm

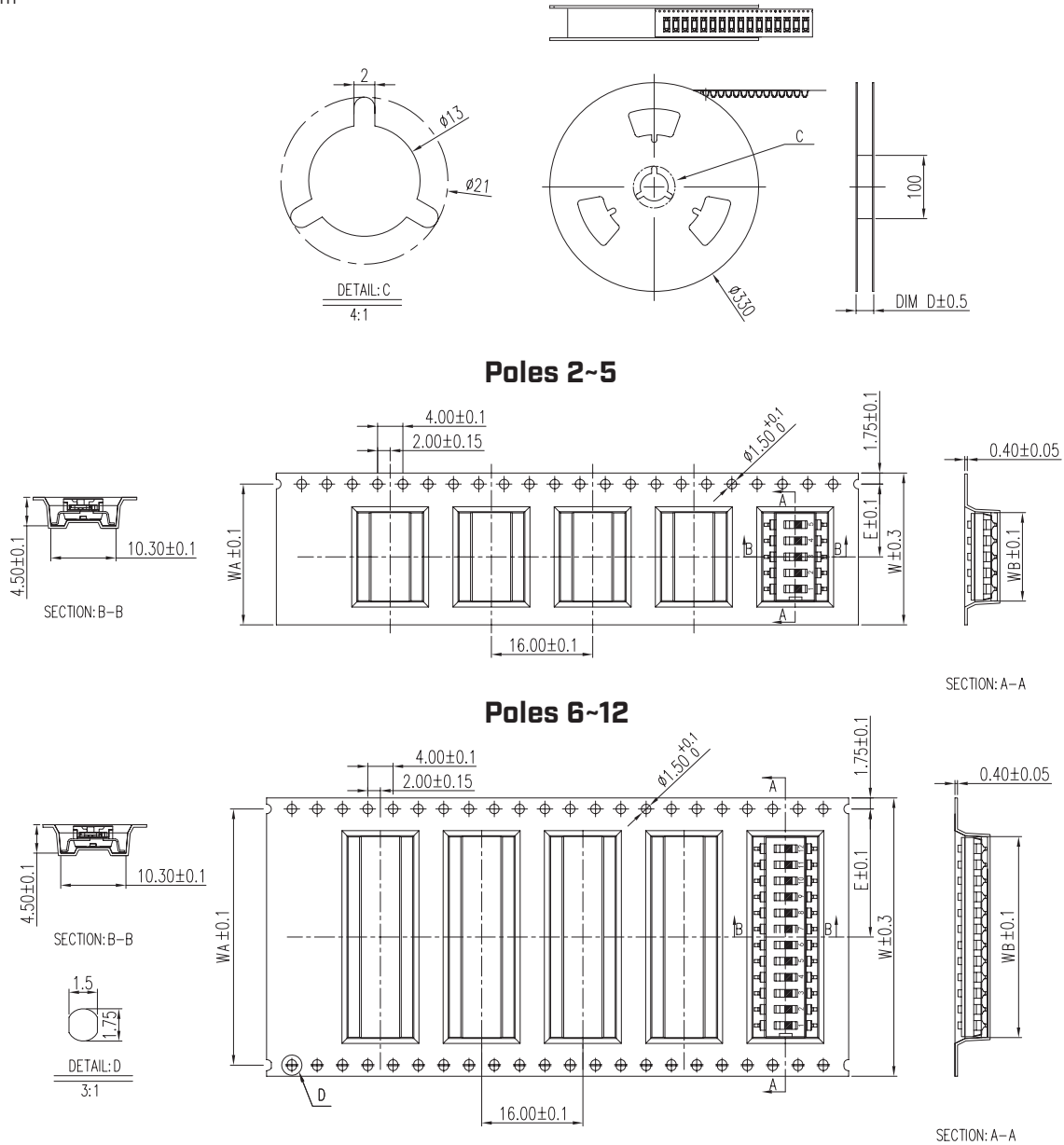
Reel Size: Ø330 mm
Reel QTY: 1500 pcs



PACKAGING (TAPE & REEL, 2~12 POLE MODELS)

units: mm

Reel Size: $\varnothing 330$ mm

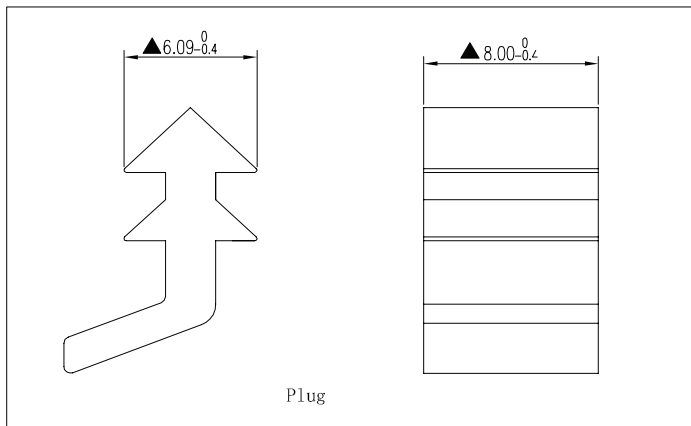
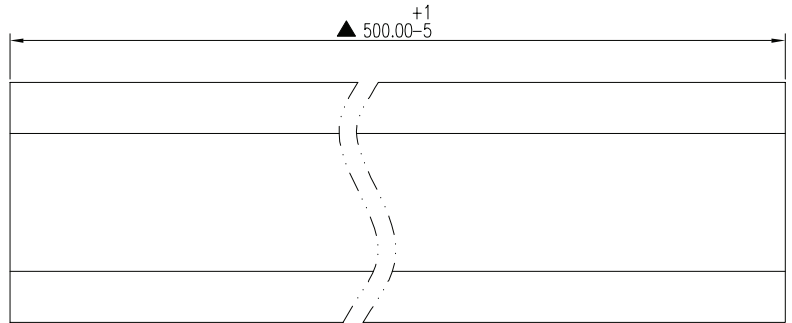
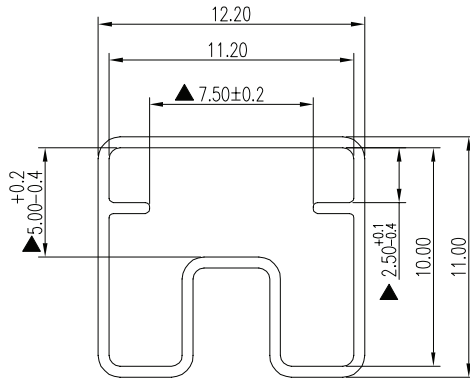


| Tape Dimensions | | | | | | |
|-----------------|--------|---------|---------|--------|--------|-----|
| #Poles | W [mm] | WA [mm] | WB [mm] | E [mm] | D [mm] | QTY |
| 2 | 16.00 | 14.55 | 6.26 | 7.50 | 20 | 800 |
| 3 | 16.00 | 14.55 | 8.92 | 7.50 | 20 | 800 |
| 4 | 24.00 | 22.25 | 11.46 | 11.50 | 28 | 800 |
| 5 | 24.00 | 22.25 | 14.00 | 11.50 | 28 | 800 |
| 6 | 32.00 | 28.50 | 16.54 | 14.20 | 36 | 800 |
| 7 | 32.00 | 28.50 | 19.08 | 14.20 | 36 | 800 |
| 8 | 44.00 | 40.50 | 21.62 | 20.25 | 48 | 800 |
| 10 | 44.00 | 40.50 | 26.70 | 20.25 | 48 | 800 |
| 12 | 44.00 | 40.50 | 31.78 | 20.25 | 48 | 800 |

PACKAGING (TUBE)

units: mm

Tube Size: 12.20 x 11.00 x 500 mm



REVISION HISTORY

| rev. | description | date |
|------|--|------------|
| 1.0 | initial release | 12/02/2019 |
| 1.01 | added tube packaging details | 03/02/2021 |
| 1.02 | changed packaging tape width on 8 pole version | 04/13/2022 |
| 1.03 | logo, datasheet style update | 08/05/2022 |

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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