



Series 222H

6.2x3.5mm Compact Tactile Switch

- Surface mount terminal configuration
- Compatible with IR reflow and manual soldering
- Variety of operating force & actuator height options



Ordering Information

| Series | Terminal Type | Actuating Direction | Actuator Height "L" | Actuator Force | Packaging | Mounting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--|---------------------|---------------------|----------------|-------------------------|---|------|-------|---|------|--|------|-------|---|-------|---|------|-------|---|--------|---|--------|---|--------|--|------|-------|---|-----------------------|---|------|-------|-------|------------|---|--------------|
| 222H | M | S | A | A | R | K | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Code</th> <th>Spec.</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>Surface mount gull wing</td> </tr> </tbody> </table> | Code | Spec. | M | Surface mount gull wing | <table border="1"> <thead> <tr> <th>Code</th> <th>Spec.</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>Side</td> </tr> </tbody> </table> | Code | Spec. | S | Side | <table border="1"> <thead> <tr> <th>Code</th> <th>Spec.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>2.1mm</td> </tr> </tbody> </table> | Code | Spec. | A | 2.1mm | <table border="1"> <thead> <tr> <th>Code</th> <th>Spec.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>120 gf</td> </tr> <tr> <td>B</td> <td>160 gf</td> </tr> <tr> <td>C</td> <td>240 gf</td> </tr> </tbody> </table> | Code | Spec. | A | 120 gf | B | 160 gf | C | 240 gf | <table border="1"> <thead> <tr> <th>Code</th> <th>Spec.</th> </tr> </thead> <tbody> <tr> <td>R</td> <td>Tape & reel packaging</td> </tr> </tbody> </table> | Code | Spec. | R | Tape & reel packaging | <table border="1"> <thead> <tr> <th>Code</th> <th>Spec.</th> </tr> </thead> <tbody> <tr> <td>Blank</td> <td>No bracket</td> </tr> <tr> <td>K</td> <td>With bracket</td> </tr> </tbody> </table> | Code | Spec. | Blank | No bracket | K | With bracket |
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| M | Surface mount gull wing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | Spec. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S | Side | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | Spec. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | 2.1mm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | Spec. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | 120 gf | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | 160 gf | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 240 gf | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | Spec. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R | Tape & reel packaging | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code | Spec. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| K | With bracket | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Notes: Contact CTS for other common features not listed.



Electrical Specifications

| Parameter | Conditions & Remarks | Min | Max | Unit |
|-----------------------|------------------------------------|-----|----------------|-----------------|
| Contact Resistance | | | 100 | milliohms |
| Insulation Resistance | Between insulated terminals | 100 | | Megohms |
| Dielectric Strength | 1 minute between adjacent switches | | 250 | VAC |
| Nonswitching Rating | | | 50 or 12 | mA or VDC |

Mechanical and Environmental

| | |
|-----------------------------|---|
| Soldering | Maximum reflow temperature, 260°C for 5 seconds Maximum manual temperature, 350°C for 3 seconds |
| RoHS | Lead-Free. Fully compliant to RoHS Directive 2011/65/EU and 2015/863/EU |
| Operating Force | 120,160 or 240 gf |
| Actuator Life | 120 gf: 1,000,000 cycles 160 gf, no bracket: 1,000,000 cycles 160gf, with bracket: 200,000 cycles 240 gf: 500,000 cycles |
| Actuator Strength | 2 Kgf maximum |
| Travel | 0.15mm |
| Packaging | Standard tape and reel packaging |
| Operating Temperature Range | -40°C to +85°C |
| Storage Temperature Range | -40°C to +85°C |

Mechanical Specifications

Figure 1 – 222H..., Surface Mount Without Bracket

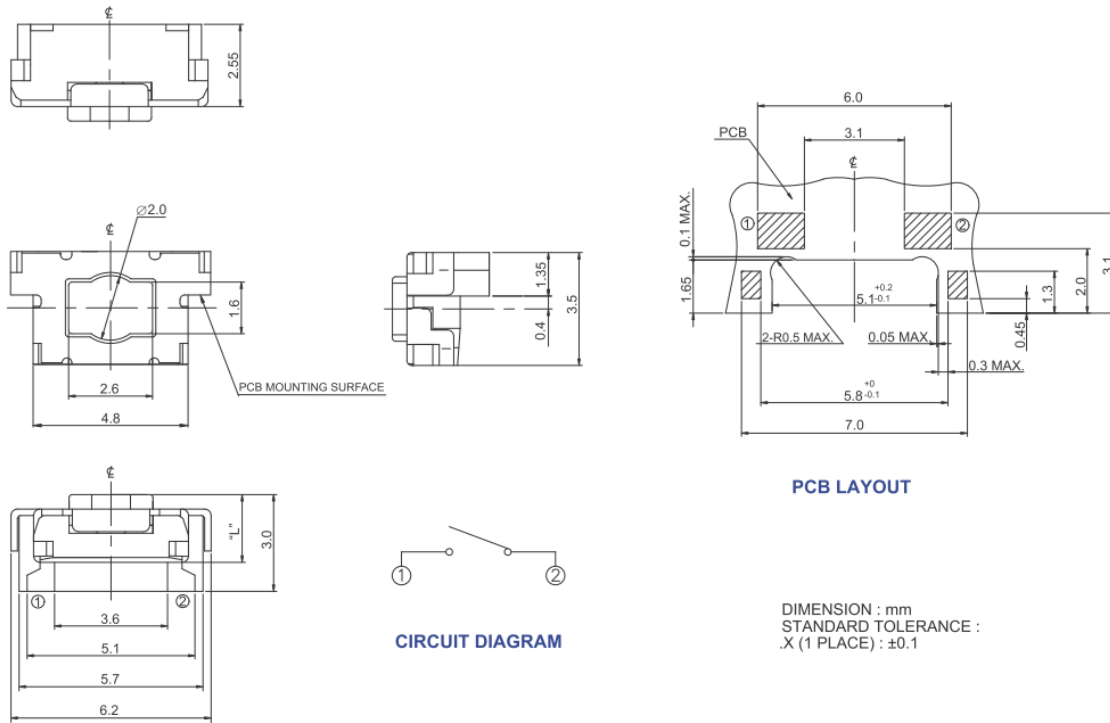
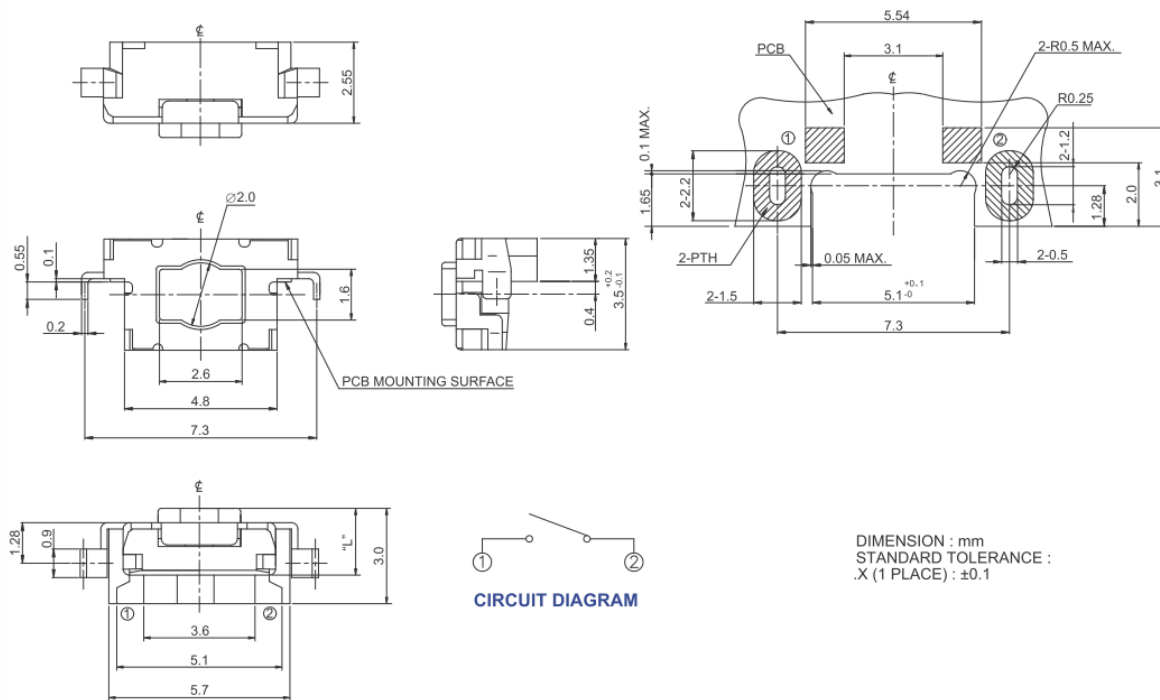


Figure 2 – 222H...K, Surface Mount With Bracket

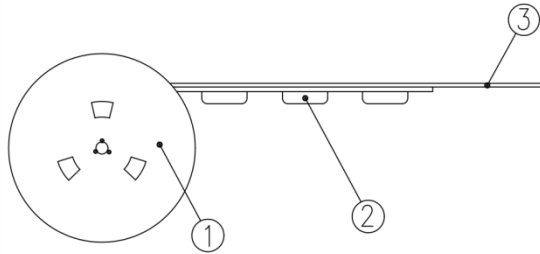


Packing: Tape and Reel

Surface Mount Without Bracket

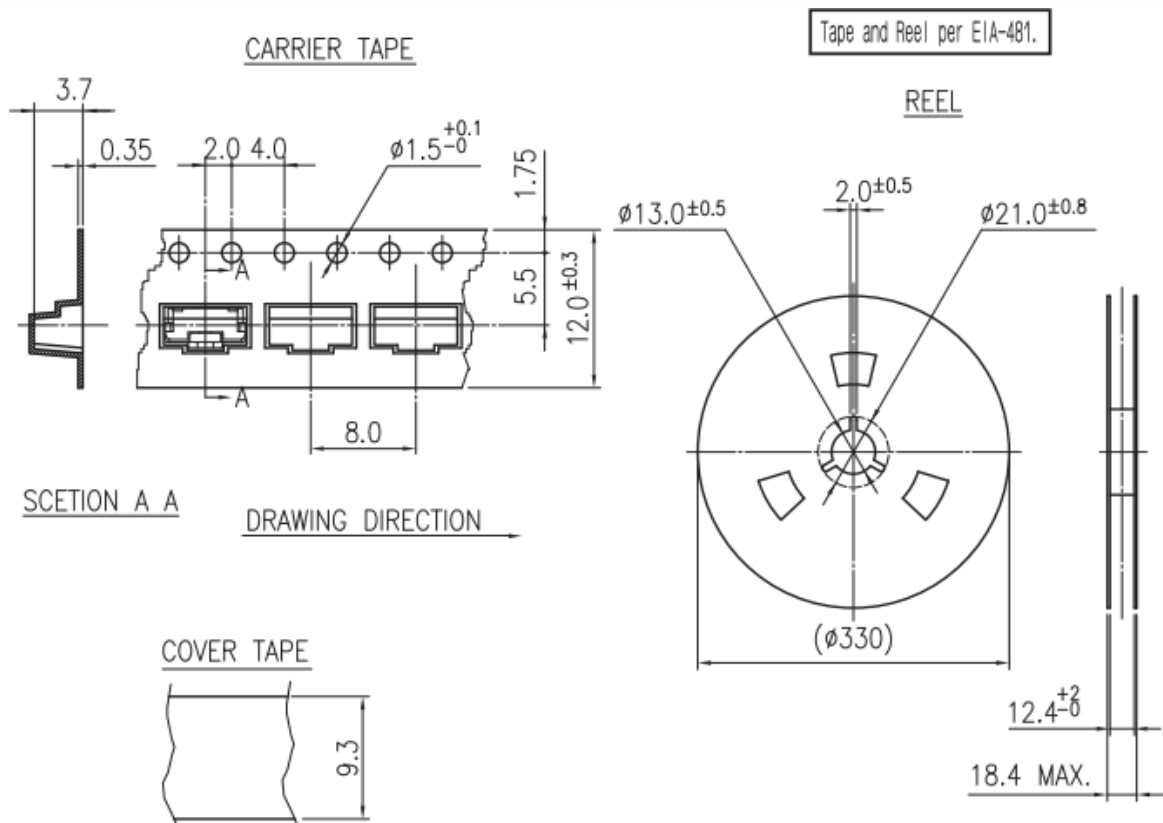
The packing specifications :

Structure and materials :



| | | |
|-----|--------------|-------------|
| ③ | COVER TAPE | POLYESTER |
| ② | CARRIER TAPE | POLYSTYRENE |
| ① | REEL | POLYSTYRENE |
| NO. | PARTS NAME | MATERIALS |

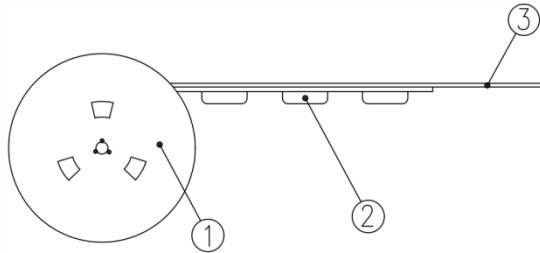
1. Packing quantity : 2,000 pcs/reel
2. More than 10 empty pockets should remain at each end of the carrier tape for each reel.
3. Shortage less than 10 pcs a reel is acceptable but more than 3 consecutive empty pockets are not allowed.
4. Stripping strength of cover tape is between 10 gf to 70 gf and stripping angle should be within 165°~180°.
5. The product in the pocket of carrier tape should be placed in a specified correct position.
6. Tape and reel per EIA-481.
7. Dimensions :



Surface Mount With Bracket

The packing specifications :

Structure and materials :



| | | |
|-----|--------------|-------------|
| ③ | COVER TAPE | POLYESTER |
| ② | CARRIER TAPE | POLYSTYRENE |
| ① | REEL | POLYSTYRENE |
| NO. | PARTS NAME | MATERIALS |

8. Packing quantity : 1,200 pcs/reel
9. More than 10 empty pockets should remain at each end of the carrier tape for each reel.
10. Shortage less than 10 pcs a reel is acceptable but more than 3 consecutive empty pockets are not allowed.
11. Stripping strength of cover tape is between 10 gf to 70 gf and stripping angle should be within 165°~180°.
12. The product in the pocket of carrier tape should be placed in a specified correct position.
13. Tape and reel per EIA-481.
14. Dimensions :

