





# Series 222A

## 6.2 x 6.2mm Compact Tactile Switch

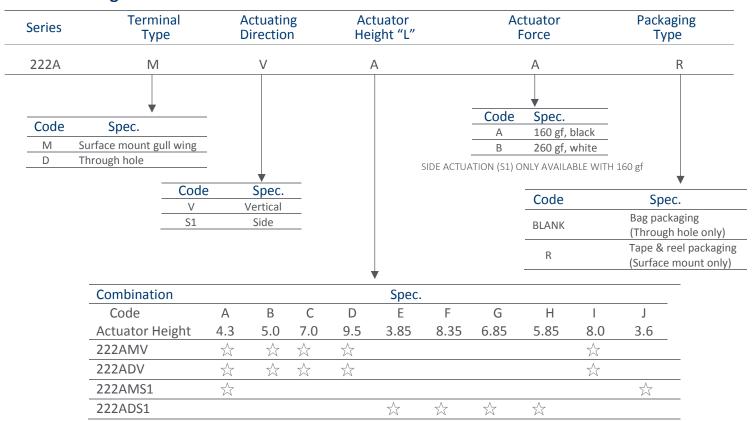
- Standard through hole and surface mount gull-wing terminal configurations
- Compatible with IR reflow, wave, and manual soldering
- Compatible with automatic dip-soldering
- Variety of operating force and actuator height options



## **Description**

Excellent tactile feedback provides the user with simple and intuitive operation. The robust internal structure ensures long product life to meet various application requirements. Common product dimensions provide options to match your existing applications.

## **Ordering Information**



Notes: Contact CTS for other common features not listed.

2018-6-28 Rev. A www.ctscorp.com Page 1 of 6

### Tactile Switch

## **Electrical Specifications**

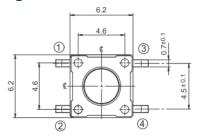
Parameter	Conditions & Remarks	Min	Max	Unit
<b>Contact Resistance</b>			100	milliohms
Insulation Resistance	Between insulated terminals	100		Megohms
Dielectric Strength	1 minute between adjacent switches		250	VAC
			50	mA
Nonswitching Rating			or 12	or VDC

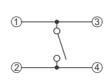
## **Mechanical and Environmental**

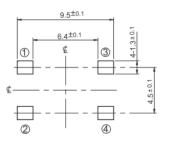
Soldering	Maximum reflow temperature, 260°C for 5 seconds Maximum manual temperature, 350°C for 3 seconds			
Actuation Life	160 gf 260 gf	1,000,000 200,000	cycles	
RoHS	Lead-Free. Fully compliant to RoHS Directive 2011/65/EU			
Operating Force	160 or 260 gf			
Actuator Strength	3 Kgf maximum			
Travel	0.25mm			
Operating Temperature Range	-40°C to +85°C			
Storage Temperature Range	-40°C to +85°C			
Packaging	Standard bag packaging for through hole terminal Standard tape and reel packaging for gull wing terminal			

## **Mechanical Specifications**

Figure 1 – Surface Mount Gull Wing, 222AM, Vertical Actuation







#### **CIRCUIT DIAGRAM**

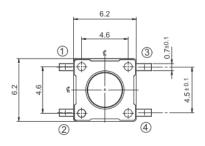


#### **PCB LAYOUT**

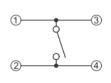
ØD	L	
3.5	4.30	
3.5	5.00	
3.0	7.00	
3.0	8.00	
3.0	9.50	

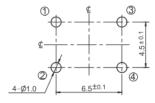
DIMENSION : mm STANDARD TOLERANCE : .X (1 PLACE) : ±0.20

Figure 2 – Through-Hole, 222AD, Vertical Actuation

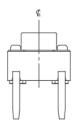


ØD





#### **CIRCUIT DIAGRAM**



#### **PCB LAYOUT**

ØD	L
3.5	4.30
3.5	5.00
3.0	7.00
3.0	8.00
3.0	9.50

DIMENSION : mm STANDARD TOLERANCE : .X (1 PLACE) : ±0.20

Figure 3 - Through-Hole, 222ADS1, Side Actuation

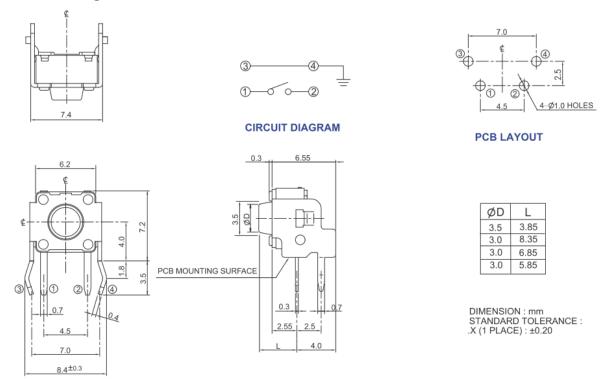
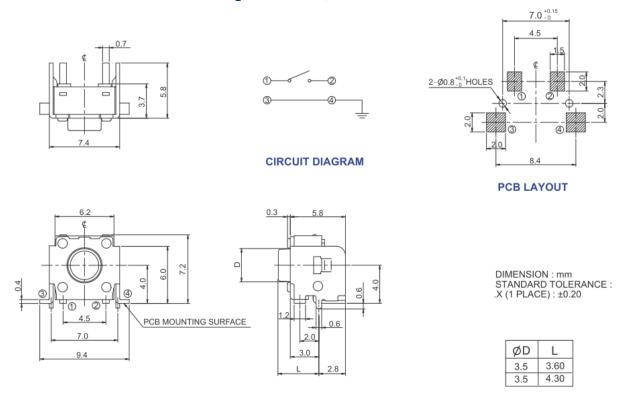


Figure 4 – Surface Mount Gull Wing, 222AMS1, Side Actuation



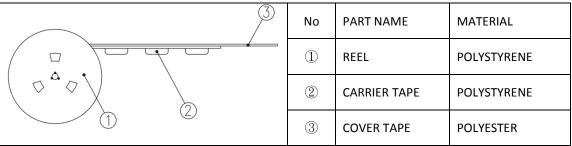
2018-6-28 Rev. A WWW.ctscorp.com Page 4 of 6

## **Packing: Tape and Reel**

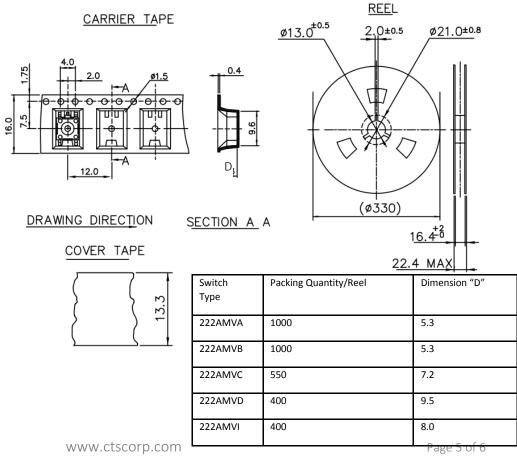
## Surface Mount Gull Wing, Top Actuation, 222AMV...

The Packing Specifications:

Structure and materials:



- 1. More than 10 empty pockets should remain at each end of the carrier tape for each reel.
- 2. Shortage of less than 10 pcs a reel is acceptable but no more than 3 consecutive empty pockets are allowed.
- 3. Stripping strength of cover tape is between 10 gf to 70 gf and stripping angle should be within  $165^{\circ}$ 180°.
- 4. The product in the pocket of carrier tape should be placed in a specified correct position.
- 5. Tape and reel per EIA-481.
- 6. Dimensions:



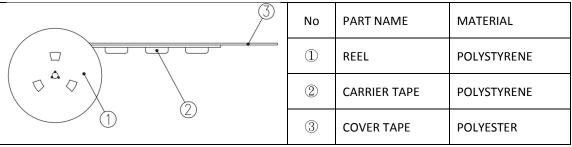
2018-6-28 Rev. A

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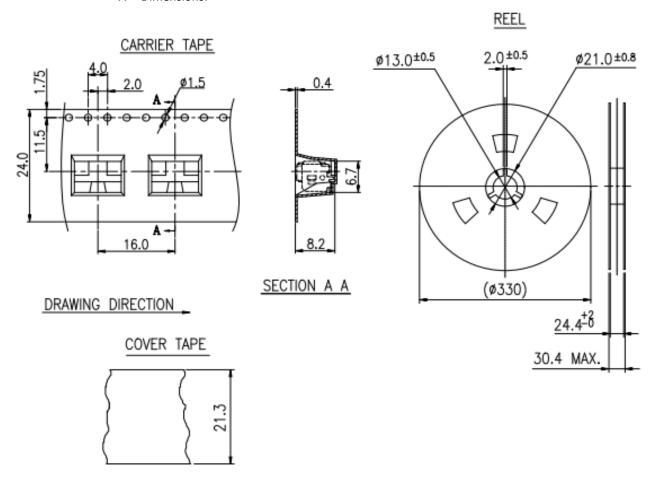
## Surface Mount Gull Wing, Side Actuation, 222AMS1...

#### The Packing Specifications:

#### Structure and materials:



- 1. Packing quantity: 500 pcs/reel
- 2. More than 10 empty pockets should remain at each end of the carrier tape for each reel.
- 3. Shortage of less than 10 pcs a reel is acceptable but no more than 3 consecutive empty pockets are allowed.
- 4. Stripping strength of cover tape is between 10 gf to 70 gf and stripping angle should be within  $165^{\circ}$ 180°.
- 5. The product in the pocket of the carrier tape should be placed in a specified correct position.
- 6. Tape and reel per EIA-481.
- 7. Dimensions:



2018-6-28 Rev. A WWW.ctscorp.com Page 6 of 6