

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



RoH:

Sense

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

Series				Actuating Actuator Direction Height "L"			Actuator Force			Packaging Type			
222A	Μ		V			А			А			R	
										•		-	
Code	Spec.								Code	Spec.			
M	Surface mount gu	ll wing							A B	160 gf, l 260 gf, v		-	
D	Through hole							JATION (S1)			U 100 of		
				•				SIDE ACTO	JATION (SI)	UNLY AVAIL	ABLE WIII	H 100 ĝi	
	-	Code		Spec.						Code		Spe	с.
	-	V Vertical S1 Side							BLANK		Bag pack		
										R		Tape & r	eel packaging mount only)
							•						
	Combinatio	n					Spec						
	Code		А	В	С	D	E	F	G	Н	I	J	
	Actuator He	eight	4.3	5.0	7.0	9.5	3.85	8.35	6.85	5.85	8.0	3.6	
	222AMV		$\stackrel{\wedge}{\sim}$	$\stackrel{\wedge}{\searrow}$	$\stackrel{\wedge}{\boxtimes}$	$\overset{\wedge}{\sim}$					$\overset{\wedge}{\sim}$		
	222ADV		$\stackrel{\wedge}{\sim}$	\mathcal{A}	$\sum_{i=1}^{n}$	$\stackrel{\wedge}{\bowtie}$					\mathcal{M}		
	222AMS1		$\overset{\wedge}{\bowtie}$									$\sum_{i=1}^{n}$	
	222ADS1						$\overrightarrow{\mathbf{x}}$	\mathcal{L}	\overrightarrow{x}				

Notes: Contact CTS for other common features not listed.

Tactile Switch

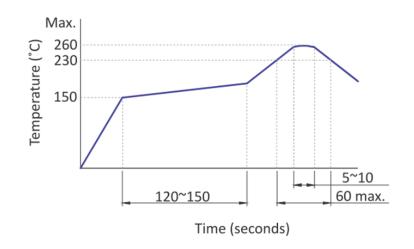
Electrical Specifications

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	mA or
Nonswitching Rating			12	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±50 gf 260±50 gf					
Actuator Strength	3 Kgf maximum					
Travel	0.25 ± 0.15 mm (vertical actuation) $0.25^{+0.2}_{-0.1}$ mm (side actuation)					
Operating Temperature Range	-40°C to +85°C					
Storage Temperature Range	-40°C to +90°C					
Packaging	Standard bag packaging for through hole terminal Standard tape and reel packaging for gull wing terminal					

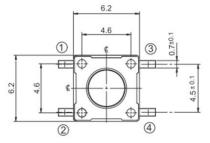
Soldering Profile

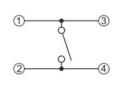


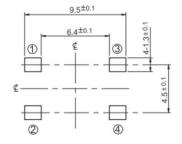
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Mechanical Specifications

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







Ø3.5 ØD ¢ 0.5 -3.3 0.3±0.1 9.0

CIRCUIT DIAGRAM

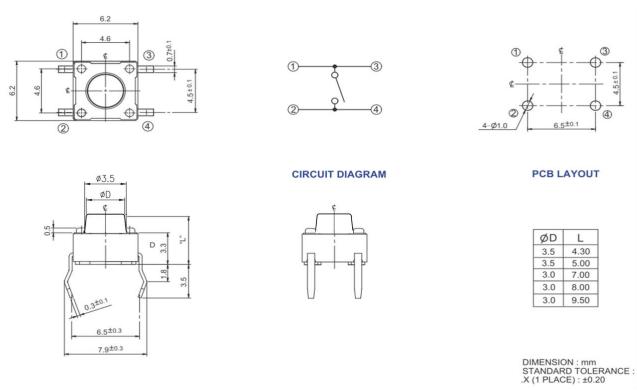


PCB LAYOUT

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

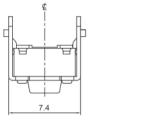
DIMENSION : mm STANDARD TOLERANCE : .X (1 PLACE) : ±0.20

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



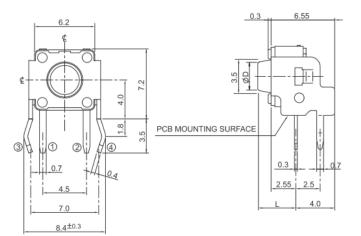
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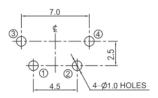
Figure 3 – Through-Hole, 222ADS1, Side Actuation



3<u>4</u> 1<u>0</u>0<u>2</u>

CIRCUIT DIAGRAM



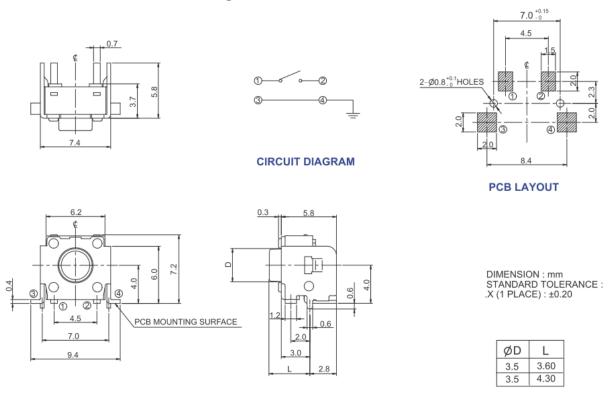


PCB LAYOUT

ØD	L
3.5	3.85
3.0	8.35
3.0	6.85
3.0	5.85

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

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

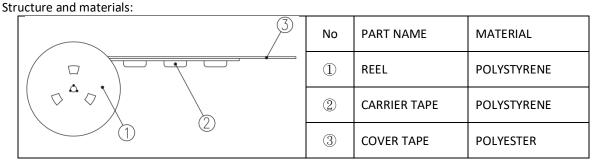


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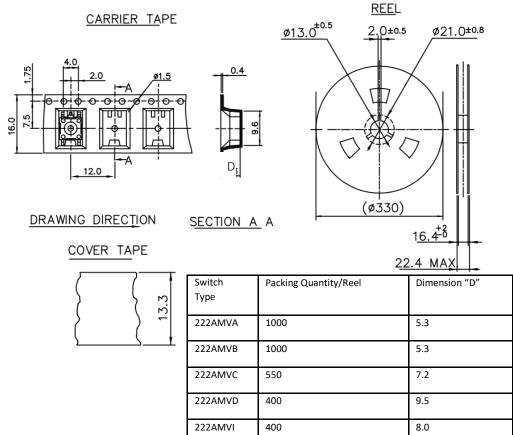
Packing: Tape and Reel

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

The Packing Specifications:



- 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°~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:

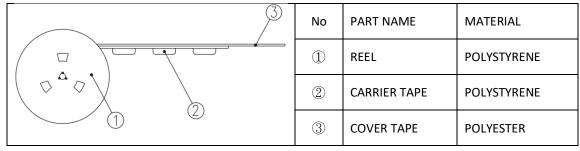


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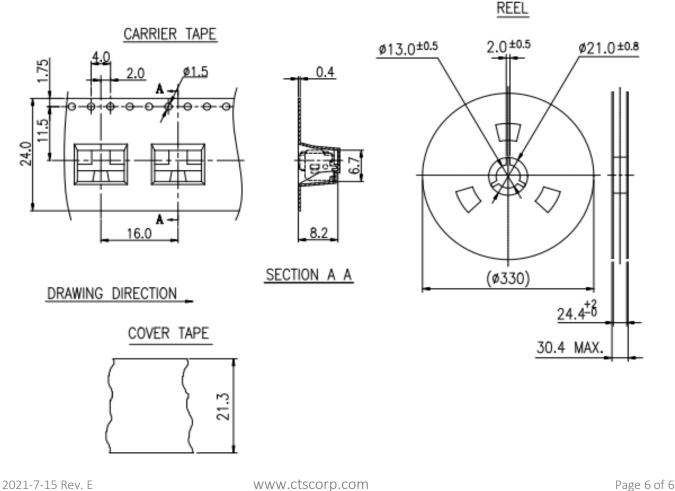
Surface Mount Gull Wing, Side Actuation, 222AMS1...

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°~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:



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