

2018-1-17 Rev. A

www.ctscorp.com

Page 1 of 4

©2018 CTS[®] Corporation. Information/product(s) subject to change. No warranty that product(s) will meet the stated specifications for customer specific applications or test equipment. Visit www.ctscorp.com for list of applicable patent(s), more information, or to request a quote.



Electrical Specifications

Parameter	Conditions & Remarks	Min	Max	Unit
Contact Resistance			100	milliohms
Insulation Resistance	Between insulated terminals	1000		megohms
Dielectric Strength	250 VDC between adjacent switches		1	minute
Nonswitching Rating			50	mA
			or	or
			32	VDC

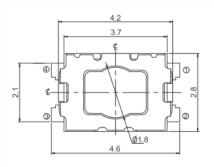
Mechanical and Environmental

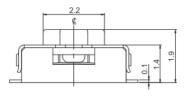
Soldering	Maximum reflow temperature, 260°C for 5 seconds Maximum manual temperature, 350°C for 3 seconds		
RoHS	Lead-Free. Fully compliant to RoHS Directive 2011/65/EU		
Operating Force	200, or 300 gf		
Actuation Life	200 gf: 200,000 cycles 300 gf: 150,000 cycles		
Actuator Strength	3 Kgf maximum		
Travel	0.25±0.1mm		
Packaging	Standard tape and reel packaging		
Operating Temperature Range	-40°C to +85°C		
Storage Temperature Range	-40°C to +85°C		
Waterproof Grade	IP67		

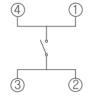


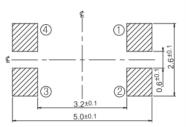
Mechanical Specifications

Figure 1 – 223JMA.., Surface Mount Gull Wing, Actuator Height 1.9mm, No Ground Terminal









CIRCUIT DIAGRAM

+

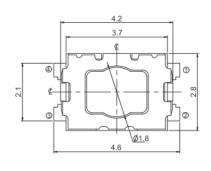
0.6

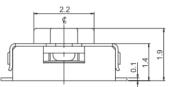
1.8

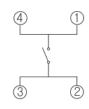
PCB LAYOUT

DIMENSION : mm STANDARD TOLERANCE : .X (1 PLACE) : ±0.2

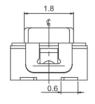
Figure 2 – 223JMA...G, Surface Mount Gull Wing, Actuator Height 1.9mm, With Ground Terminal

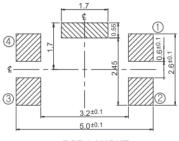






CIRCUIT DIAGRAM





PCB LAYOUT

DIMENSION : mm STANDARD TOLERANCE : .X (1 PLACE) : ±0.2

2018-1-17 Rev. A

www.ctscorp.com

Page 3 of 4

©2018 CTS® Corporation. Information/product(s) subject to change. No warranty that product(s) will meet the stated specifications for customer specific applications or test equipment. Visit www.ctscorp.com for list of applicable patent(s), more information, or to request a quote.

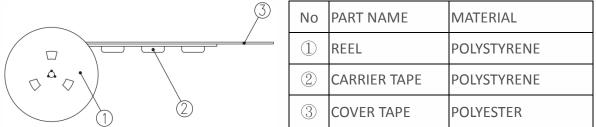


Packing: Tape and Reel

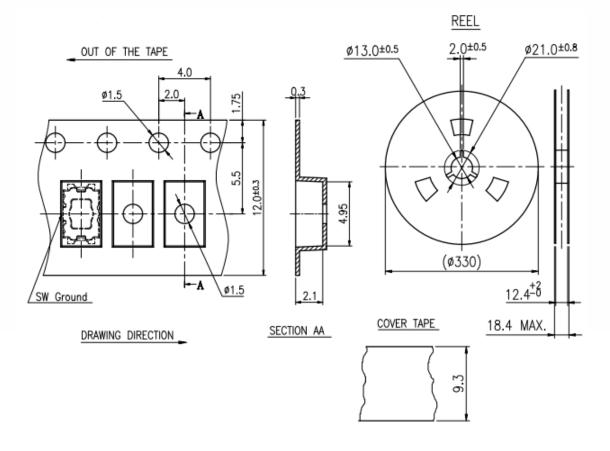
Surface Mount Gull Wing, Actuator Height 1.9mm

The packing specifications:

1. Structure and materials:



- 2. Packing quantity: 7,000 pcs/reel
- 3. More than 10 empty pockets should remain at each end of the carrier tape for each reel.
- 4. Shortage of less than 10 pcs a reel is acceptable but no more than 3 consecutive empty pockets are allowed.
- 5. Stripping strength of cover tape is between 10 gf to 130 gf and stripping angle should be within 165°~180°.
- 6. The product in the pocket of carrier tape should be placed in a specified correct position.
- 7. Tape and reel per EIA-481.
- 8. Dimensions:



2018-1-17 Rev. A

www.ctscorp.com

Page 4 of 4

©2018 CTS® Corporation. Information/product(s) subject to change. No warranty that product(s) will meet the stated specifications for customer specific applications or test equipment. Visit www.ctscorp.com for list of applicable patent(s), more information, or to request a quote.