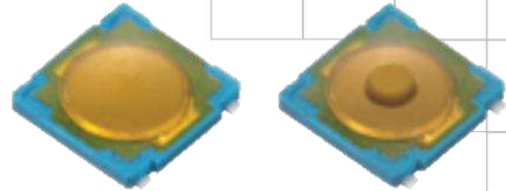




Series 223B

4.5x4.5mm Compact Tactile Switch

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



Ordering Informatio

Series	Terminal Type	Actuating Direction	Actuator Height "L"	Actuator Force	Packaging																								
223B	M1	V	A	A	R																								
	↓	↓	↓	↓	↓																								
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Notes: Contact CTS for other common features not listed.

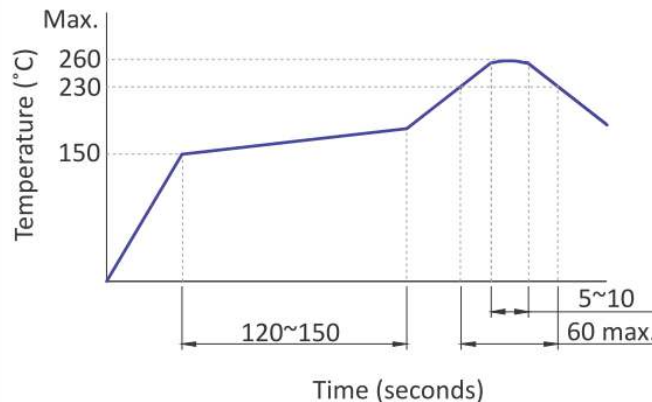
Electrical Specifications

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
Operating Force	100±30 gf 160±30 gf 260±50 gf
Actuation Life (button)	100 gf: 500,000 cycles 160 gf: 500,000 cycles 260 gf: 200,000 cycles
Actuation Life (flat)	100 gf: 1,000,000 cycles 160 gf: 1,000,000 cycles 260 gf: 200,000 cycles
Actuator Strength	3 Kgf maximum
Travel	0.2 ^{+0.15} _{-0.1} mm
Packaging	Standard tape and reel packaging
Operating Temperature Range	-40°C to +85°C
Storage Temperature Range	-40°C to +85°C

Soldering Profile



Mechanical Specifications

Figure 1 – 223BM1VA..., Surface Mount Gull Wing Type 1, Flat Surface

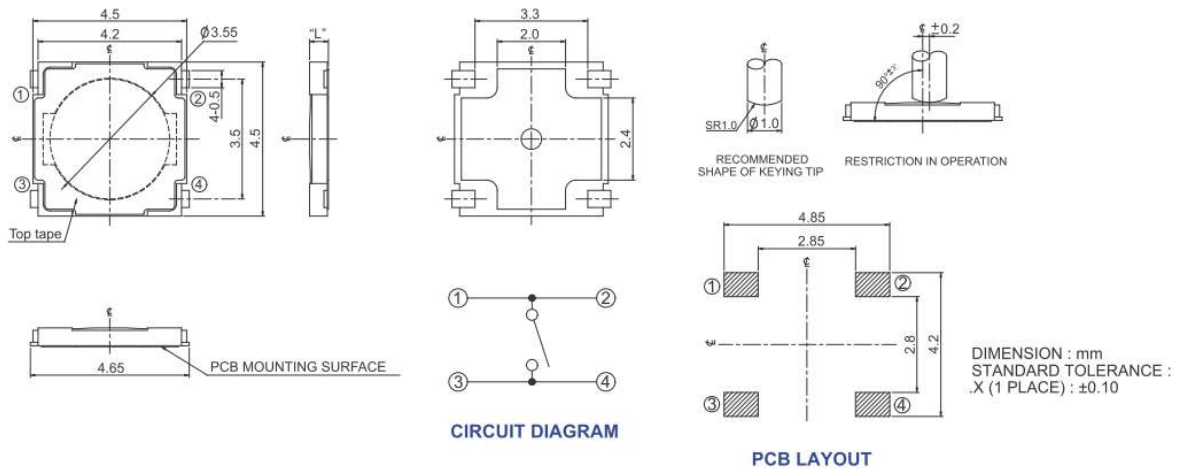


Figure 2 – 223BM2VA..., Surface Mount Gull Wing Type 2, Flat surface

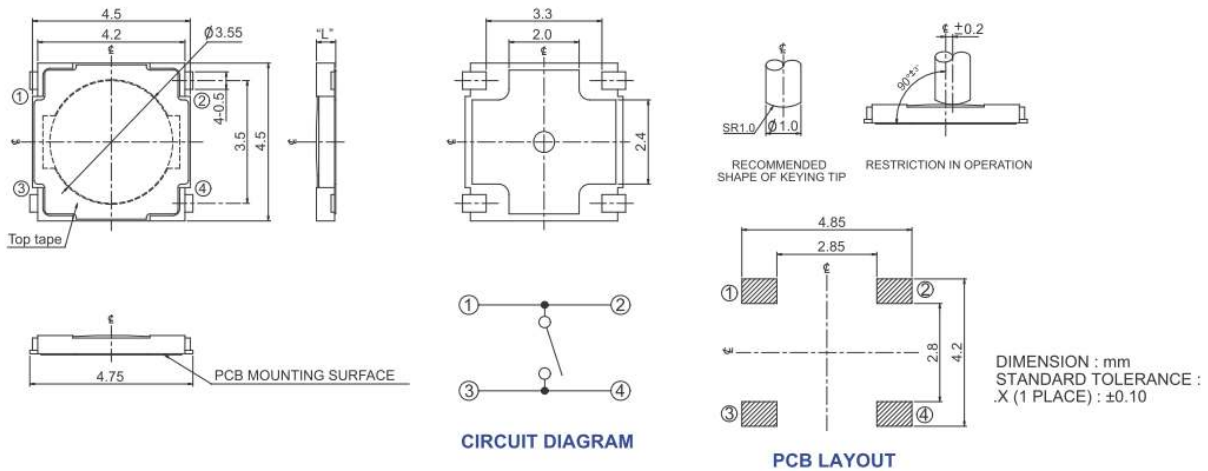
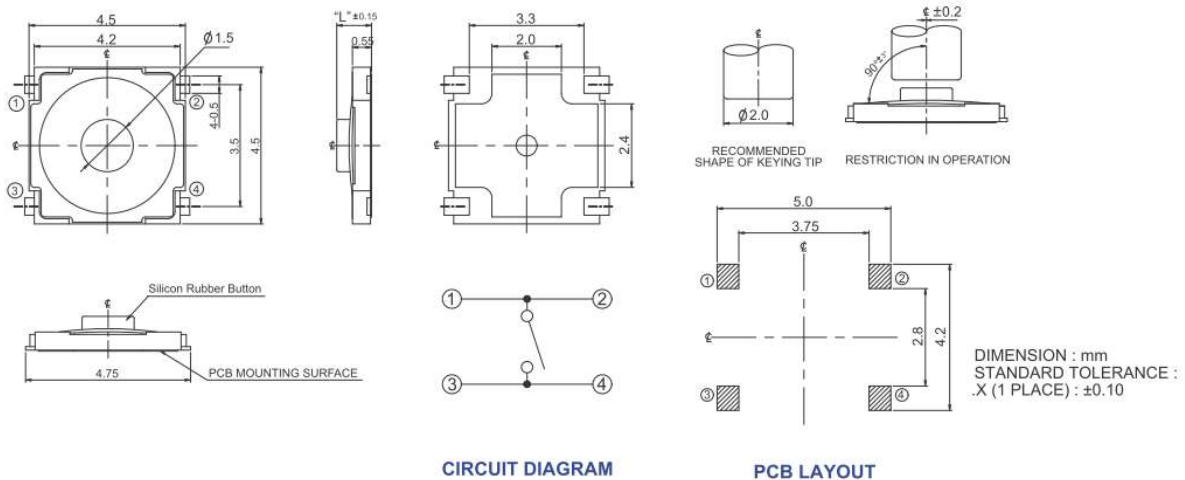


Figure 3 – 223BM2VB..., Surface Mount Gull Wing Type 2, With Button

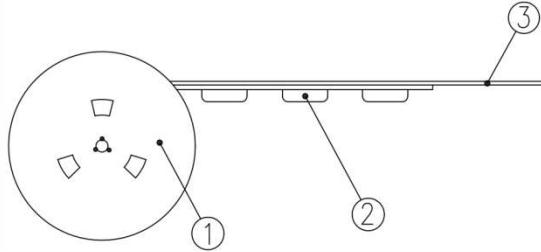


Packing: Tape and Reel

Surface Mount Gull Wing Flat Surface

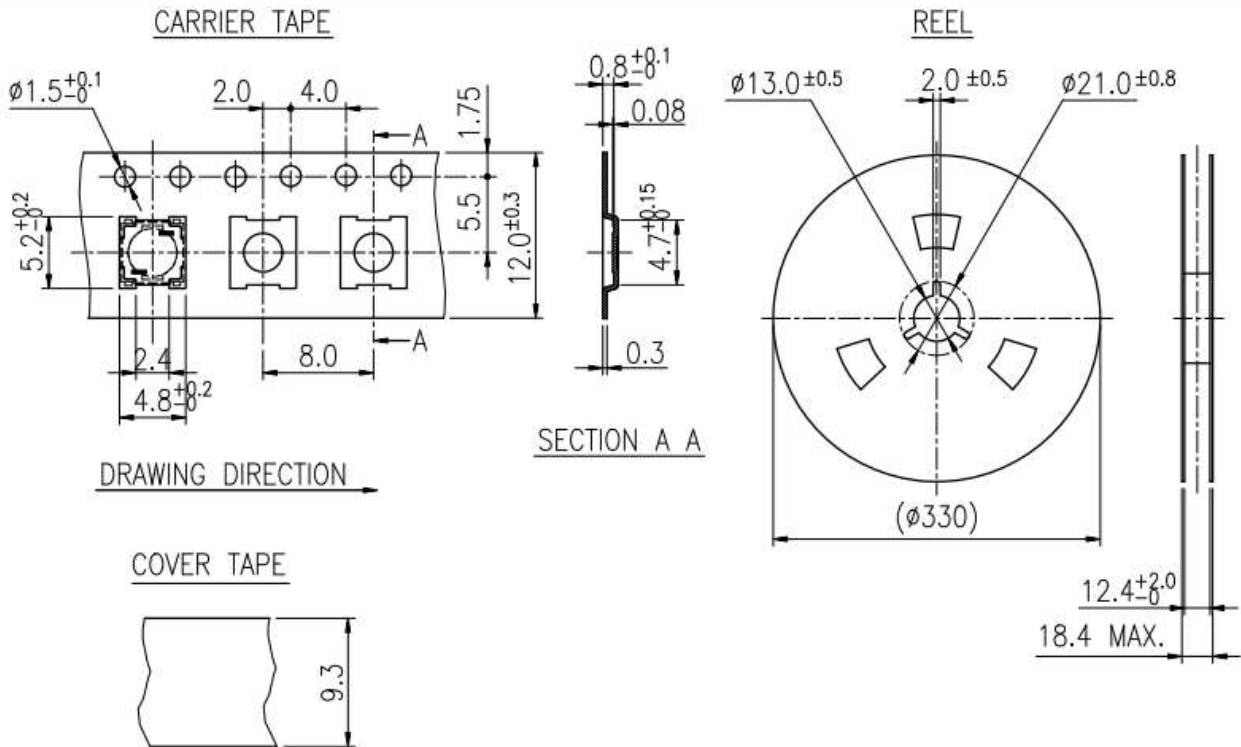
The packing specifications :

Structure and materials :



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

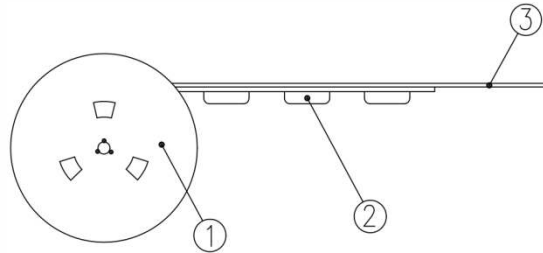
1. Packing quantity : 7,000 pcs/reel
2. More than 10 empty pockets should remain at each end of the carrier tape for each reel.
3. Shortage less than 10 pcs a reel is acceptable but more than 3 consecutive empty pockets are allowed.
4. Stripping strength of cover tape is between 10 gf to 70 gf and stripping 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 Gull Wing With Button

The packing specifications :

Structure and materials :



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

1. Packing quantity : 5,500 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 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 carrier tape should be placed in a specified correct position.
6. Tape and reel per EIA-481.
7. Dimensions :

