

GT Series Sealed Ultraminiature Toggle Switches

Features/Benefits

- Sealed against solder and cleaning process contaminants
- Ultraminiature size, smallest footprint available
- Thru-hole and surface mount models
- High temperature materials (UL 94V-0)
- RoHS compliant and compatible

Typical Applications

- Hand-held telecommunications
- Small instrumentation



Specifications

CONTACT RATING: 0.4 VA max. @ 20V AC or DC max.

MECHANICAL & ELECTRICAL LIFE: 40,000 make-and-break cycles at full load.

CONTACT RESISTANCE: Below 50m Ω typ. initial @ 2-4V DC, 100mA.

INSULATION RESISTANCE: 10⁹ Ω min.

DIELECTRIC STRENGTH: 500Vrms min. @ sea level.

OPERATING TEMPERATURE: -30°C to 85°C.

SOLDERABILITY: Per ML-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

PACKAGING: Surface mount switches shipped in anti-static tape and reel packaging per EIA 481-3 see page G-47 for drawings and reel information. Tape and cover strip are conductive for use near statically sensitive components, consult Customer Service Center.

Materials

HOUSING AND BASE: Glass filled nylon 6/6 or 4/6 flame retardant, heat stabilized (UL 94V-0).

ACTUATOR: Glass filled nylon 4/6 flame retardant, heat stabilized (UL 94V-0) with standard internal o-ring seal.

SWITCH SUPPORT: Brass, tin plated.

MOVABLE CONTACTS: Copper alloy, with gold plate over nickel plate.

STATIONARY CONTACTS: Copper alloy, with gold plate over nickel plate.

TERMINALS: Gold.

TERMINAL SEAL: Epoxy. All terminals insert molded.

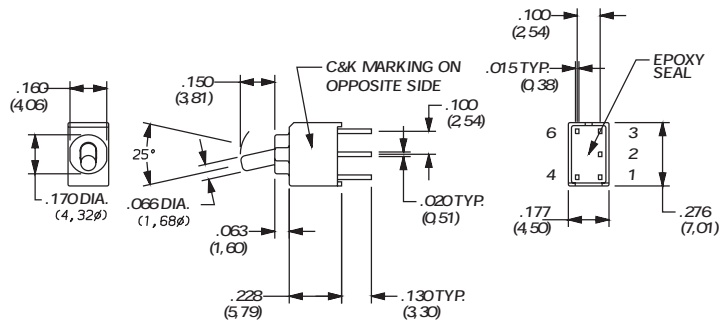
NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

How To Order

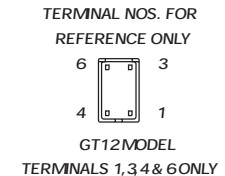
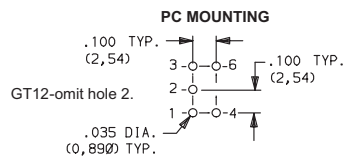
Complete part numbers for GT Series Sealed Ultraminiature Toggle Switches are shown on pages G-43 thru G-47.



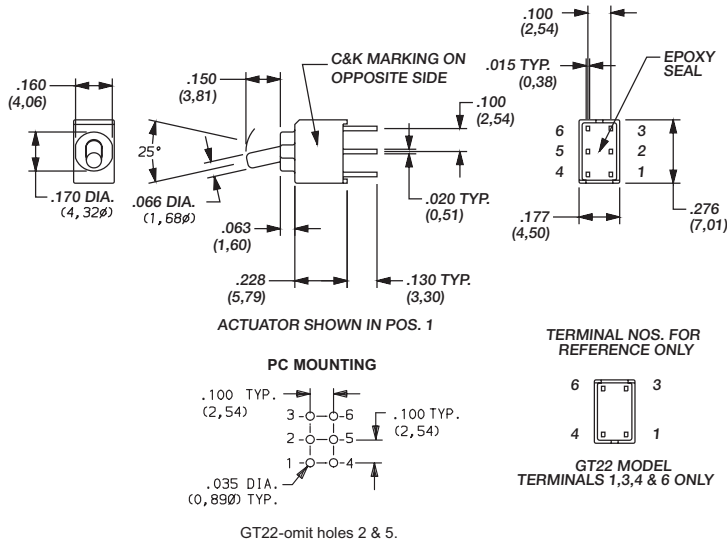
PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
GT11MCBE	ON	NONE	ON
GT13MCBE	ON	OFF	ON
Conn. Terms.	2-3	OPEN	2-1
Schematic			
SPDT	Note: Pins 4 and 6 not connected		
GT12MCBE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic			
SPST	Note: Pins 4 and 6 not connected		



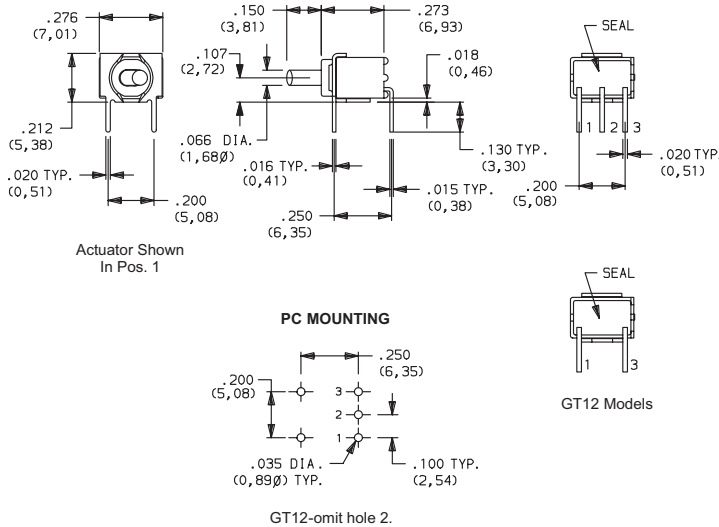
ACTUATOR SHOWN IN POS. 1



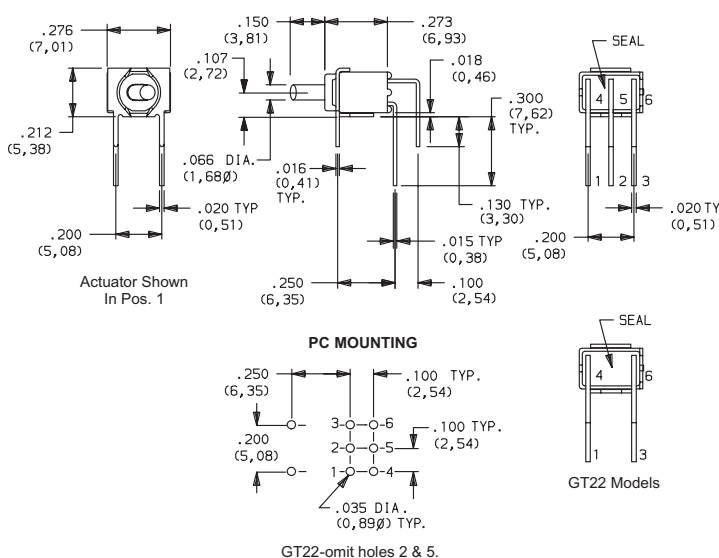
GT Series Sealed Ultraminiature Toggle Switches



PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
GT 21MCBE	ON	NONE	ON
GT 23MCBE	ON	OFF	ON
Conn. Terms.	2-3 5-6	OPEN	2-1, 5-4
Schematic			
DPDT			
GT 22MCBE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic			
DPST			



PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
GT 11MABE	ON	NONE	ON
GT 13MABE	ON	OFF	ON
Conn. Terms.	2-3	OPEN	2-1
Schematic			
SPDT			
GT 12MABE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic			
SPST			



PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
GT 21MABE	ON	NONE	ON
GT 23MABE	ON	OFF	ON
Conn. Terms.	2-3 5-6	OPEN	2-1, 5-4
Schematic			
DPDT			
GT 22MABE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1, 6-4
Schematic			
DPST			



Toggle



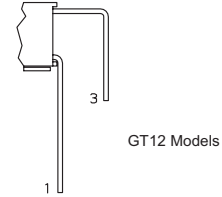
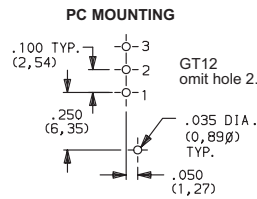
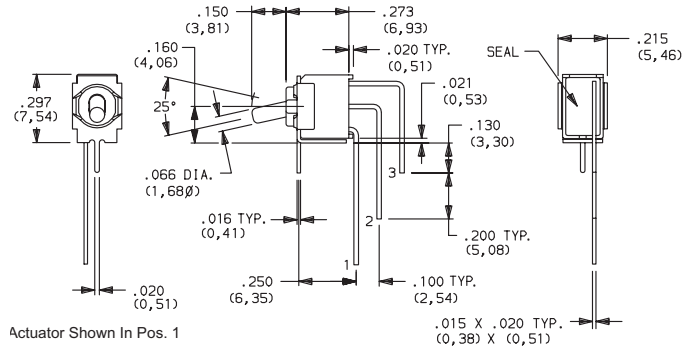
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

GT Series Sealed Ultraminiature Toggle Switches



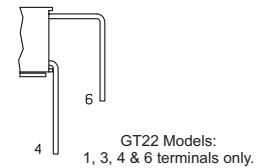
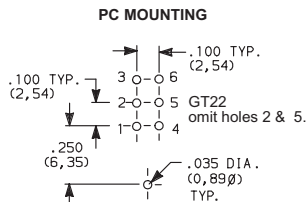
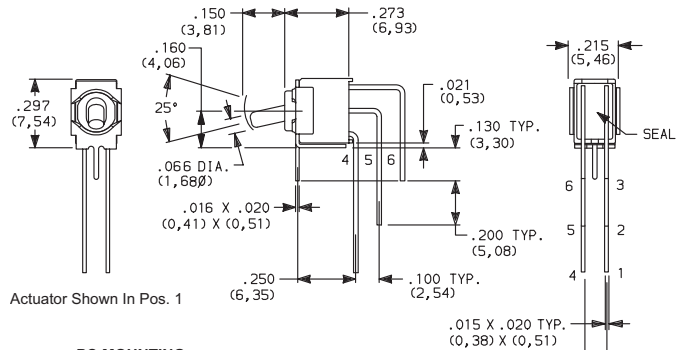
GT11MAVBE
Vertical
Actuation
SPDT

PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
GT11MAVBE	ON	NONE	ON
GT13MAVBE	ON	OFF	ON
Conn. Terms.	2-3	OPEN	2-1
Schematic			
SPDT			
GT12MAVBE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic			
SPST			



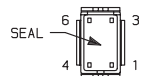
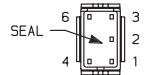
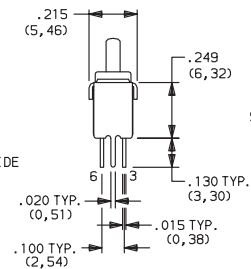
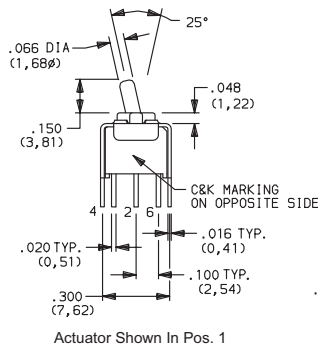
GT21MAVBE
Vertical
Actuation
DPDT

PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
GT21MAVBE	ON	NONE	ON
GT23MAVBE	ON	OFF	ON
Conn. Terms.	2-3 5-6	OPEN	2-1, 5-4
Schematic			
DPDT			
GT22MAVBE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1, 6-4
Schematic			
DPST			

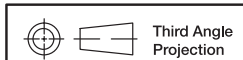
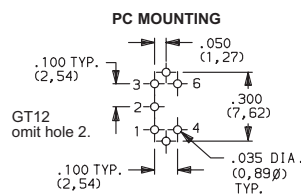


GT11M/3BE
SPDT

PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
GT11M/3BE	ON	NONE	ON
GT13M/3BE	ON	OFF	ON
Conn. Terms.	2-3	OPEN	2-1
Schematic			
SPDT			
Note: Pins 4 and 6 not connected			
GT12M/3BE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic			
SPST			
Note: Pins 4 and 6 not connected			



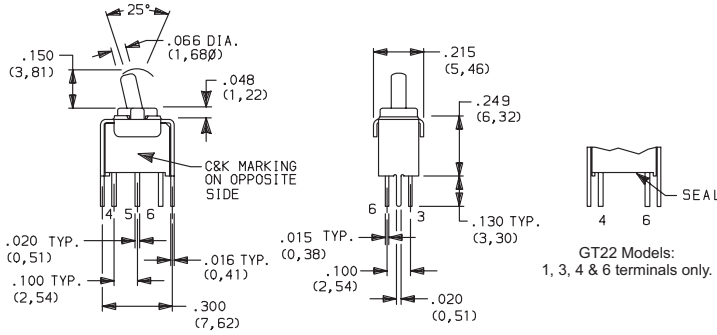
GT12 Models



Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

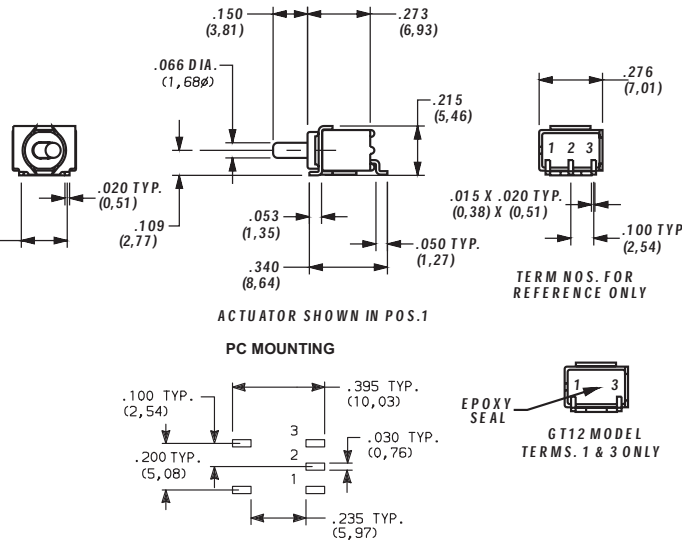


GT Series Sealed Ultraminiature Toggle Switches



PART NUMBER	SWITCH FUNCTION		
	POS.1	POS. 2	POS. 3
GT21MV3BE GT23MV3BE	ON	NONE	ON
Conn. Terms.	2-3 5-6	OPEN	2-1, 5-4
Schematic			
DPDT			
GT22MV3BE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1, 6-4
Schematic			
DPST			

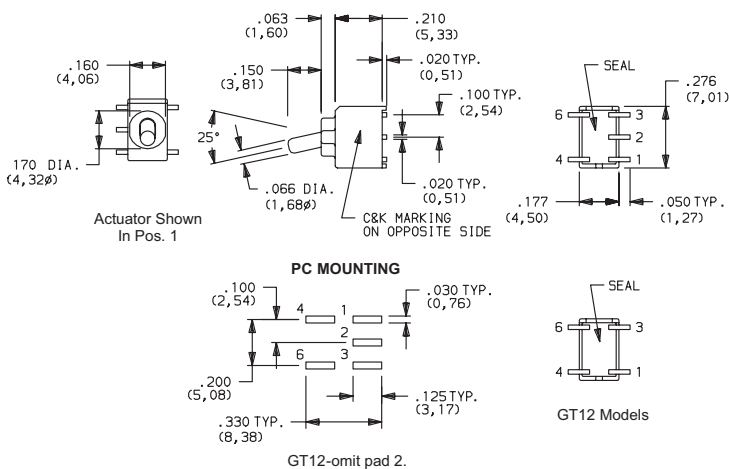
SMT



PART NUMBER	SWITCH FUNCTION		
	POS.1	POS. 2	POS. 3
GT11MSABETR GT13MSABETR	ON	NONE	ON
Conn. Terms.	2-3	OPEN	2-1
Schematic			
SPDT			
GT12MSABETR	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic			
SPST			

Standard with tape & reel packaging, see page G-47.

SMT

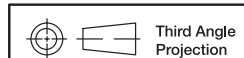


PART NUMBER	SWITCH FUNCTION		
	POS.1	POS. 2	POS. 3
GT11MSCBETR GT13MSCBETR	ON	NONE	ON
Conn. Terms.	2-3	OPEN	2-1
Schematic			
SPDT	Note: Pins 4 and 6 not connected		
GT12MSCBETR	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic			
SPST	Note: Pins 4 and 6 not connected		

Standard with tape & reel packaging, see page G-47.



Toggle



Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

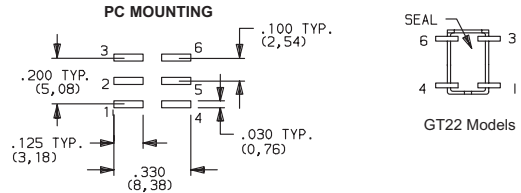
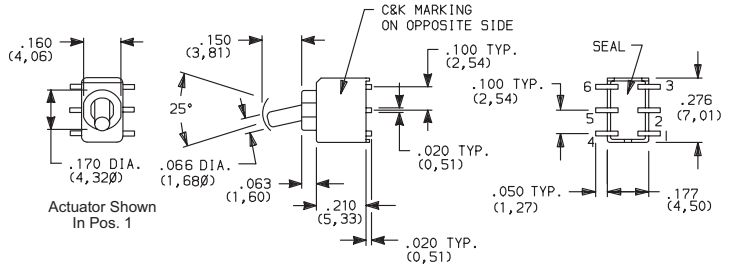
GT Series Sealed Ultraminiature Toggle Switches

SMT



GT21MSCBE
DPDT

PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
GT21MSCBETR	ON	NONE	ON
GT23MSCBETR	ON	OFF	ON
Conn. Terms.	2-3 5-6	OPEN	2-1, 5-4
Schematic			
DPDT			
GT22MSCBETR	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1, 6-4
Schematic			
DPST			

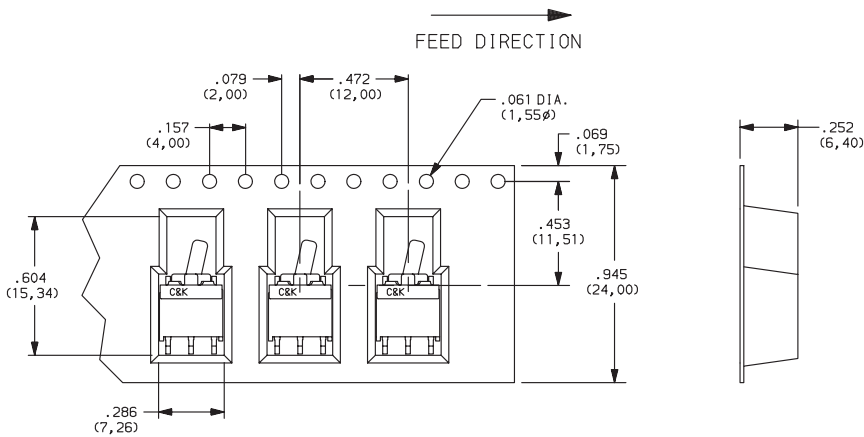


GT22-omit pads 2 & 5.

Standard with tape & reel packaging, see page G-47.

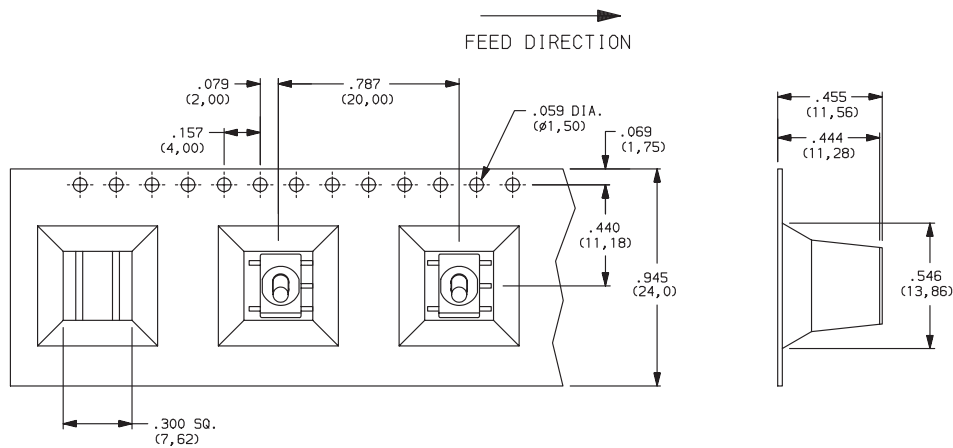
TAPE & REEL

For part numbers GT11MSABE, GT12MSABE, GT13MSABE

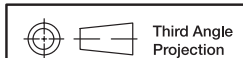


REEL INFORMATION	
OUTSIDE DIAMETER	13.00 (330.0)
PILOT HOLE	.512 (13.0)
QUANTITY PER REEL	600

For part numbers GT11MSCBE, GT12MSCBE, GT13MSCBE, GT21MSCBE, GT22MSCBE, GT23MSCBE,



REEL INFORMATION	
OUTSIDE DIAMETER	13.00 (330.0)
PILOT HOLE	.512 (13.0)
QUANTITY PER REEL	200



Dimensions are shown: Inch (mm)
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Toggle