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. @ 20 V AC or DC max.

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

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

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 500 Vrms min. @ sea level.

OPERATING TEMPERATURE: –30ºC to 85ºC.

SOLDERABILITY: Per MIL-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 F-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 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.

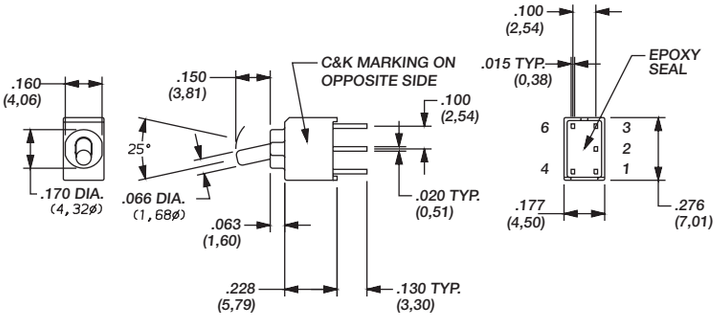
How To Order

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

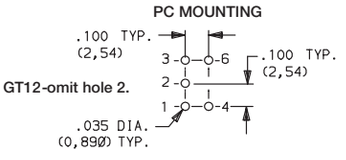


GT11MCBE
SPDT

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

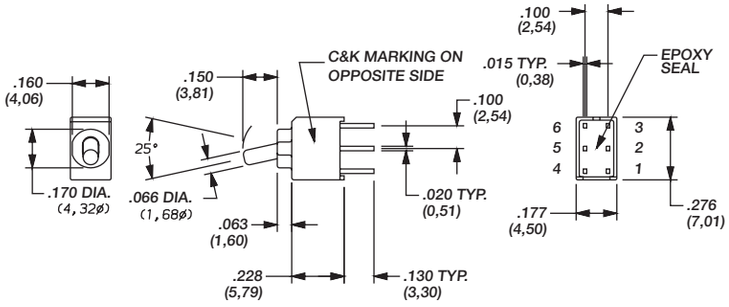




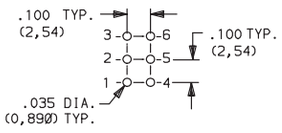
F
Toggle

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

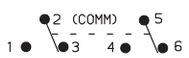
GT Series
Sealed Ultraminiature Toggle Switches



PC MOUNTING

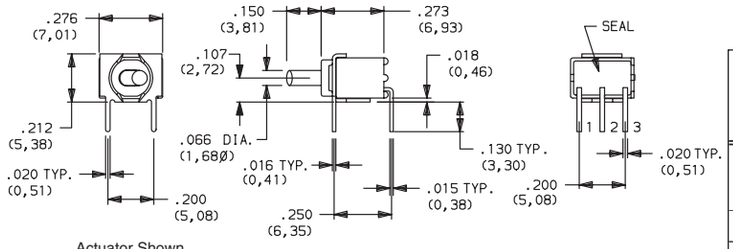


GT22-omit holes 2 & 5.

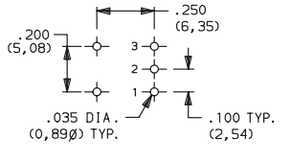
PART NUMBER	SWITCH FUNCTION POS.1	POS. 2	POS. 3
GT21MCBE	ON	NONE	ON
GT23MCBE	ON	OFF	ON
Conn. Terms.	2-3, 5-6	OPEN	2-1, 5-4
Schematic DPDT			
GT22MCBE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic DPST			



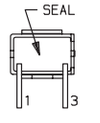
GT21MCBE
DPDT



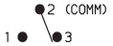
PC MOUNTING



GT12-omit hole 2.

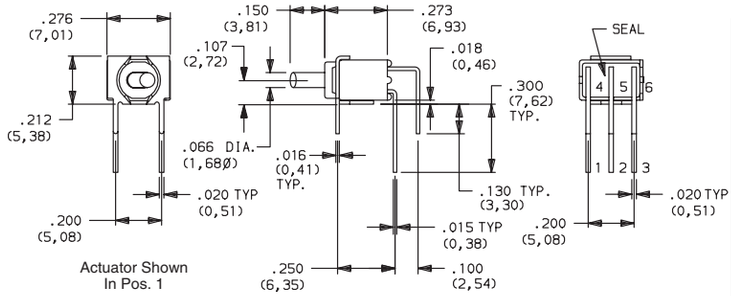


GT12 Models

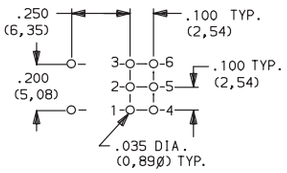
PART NUMBER	SWITCH FUNCTION POS.1	POS. 2	POS. 3
GT11MABE	ON	NONE	ON
GT13MABE	ON	OFF	ON
Conn. Terms.	2-3	OPEN	2-1
Schematic SPDT			
GT12MABE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic SPST			



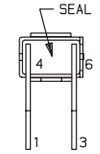
GT11MABE
Horizontal
Actuation
SPDT



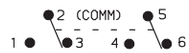
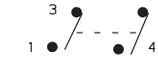
PC MOUNTING



GT22-omit holes 2 & 5.



GT22 Models

PART NUMBER	SWITCH FUNCTION POS.1	POS. 2	POS. 3
GT21MABE	ON	NONE	ON
GT23MABE	ON	OFF	ON
Conn. Terms.	2-3, 5-6	OPEN	2-1, 5-4
Schematic DPDT			
GT22MABE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1, 6-4
Schematic DPST			



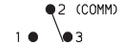
GT21MABE
Horizontal
Actuation
DPDT

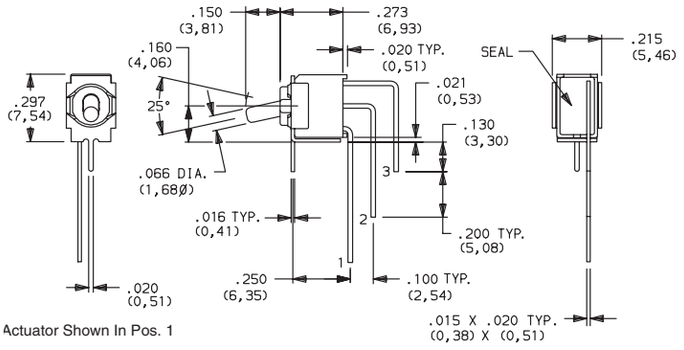
Third Angle Projection

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



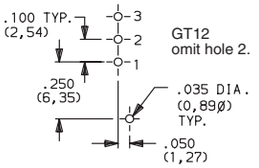
GT11MAVBE
Vertical
Actuation
SPDT

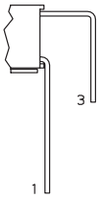
PART NUMBER	SWITCH FUNCTION POS.1	POS. 2	POS. 3
GT11MAVBE	ON	NONE	ON
GT13MAVBE	ON	OFF	ON
Conn. Terms.	2-3	OPEN	2-1
Schematic SPDT			
GT12MAVBE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic SPST			



Actuator Shown In Pos. 1

PC MOUNTING

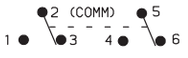


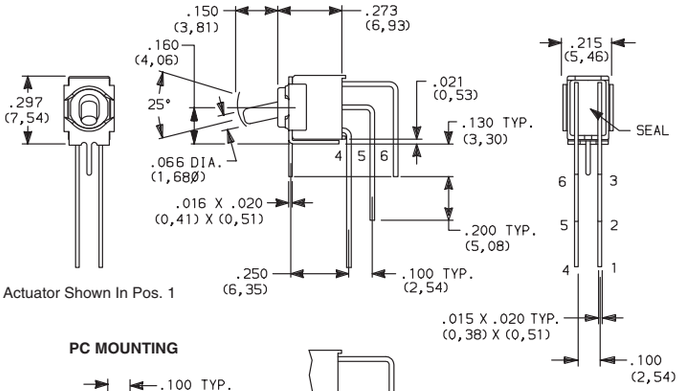


GT12 Models



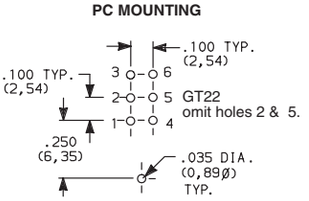
GT21MAVBE
Vertical
Actuation
DPDT

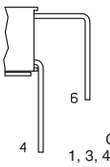
PART NUMBER	SWITCH FUNCTION POS.1	POS. 2	POS. 3
GT21MAVBE	ON	NONE	ON
GT23MAVBE	ON	OFF	ON
Conn. Terms.	2-3, 5-6	OPEN	2-1, 5-4
Schematic DPDT			
GT22MAVBE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1, 6-4
Schematic DPST			



Actuator Shown In Pos. 1

PC MOUNTING

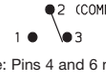


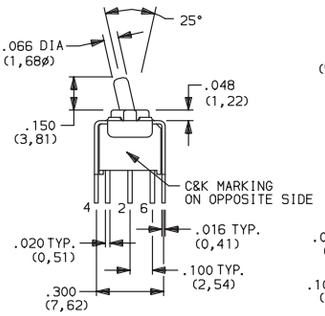


GT22 Models:
1, 3, 4 & 6 terminals only.

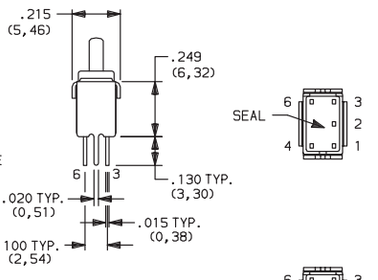


GT11MV3BE
SPDT

PART NUMBER	SWITCH FUNCTION POS.1	POS. 2	POS. 3
GT11MV3BE	ON	NONE	ON
GT13MV3BE	ON	OFF	ON
Conn. Terms.	2-3	OPEN	2-1
Schematic SPDT		Note: Pins 4 and 6 not connected	
GT12MV3BE	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic SPST		Note: Pins 4 and 6 not connected	

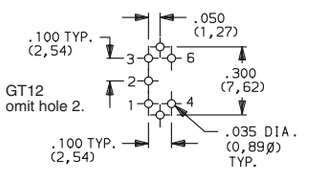


Actuator Shown In Pos. 1



GT12 Models

PC MOUNTING



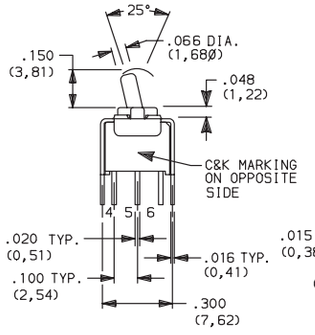
Third Angle Projection

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

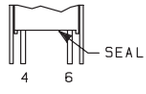
GT Series
Sealed Ultraminiature Toggle Switches



GT21MV3BE
DPDT

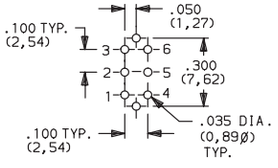


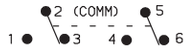
Actuator Shown
In Pos. 1



GT22 Models:
1, 3, 4 & 6 terminals only.

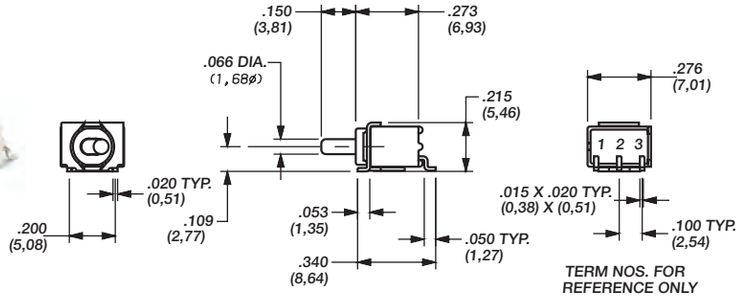
PC MOUNTING



PART NUMBER	SWITCH FUNCTION POS.1	POS. 2	POS. 3
GT21MV3BE	ON	NONE	ON
GT23MV3BE	ON	OFF	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			



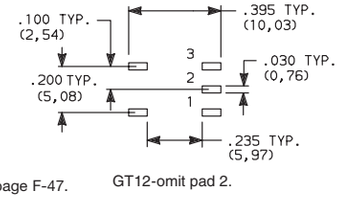
GT11MSABE
Horizontal
Actuation
SPDT

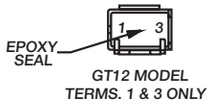


ACTUATOR SHOWN IN POS.1

TERM NOS. FOR REFERENCE ONLY

PC MOUNTING





GT12 MODEL TERMS. 1 & 3 ONLY

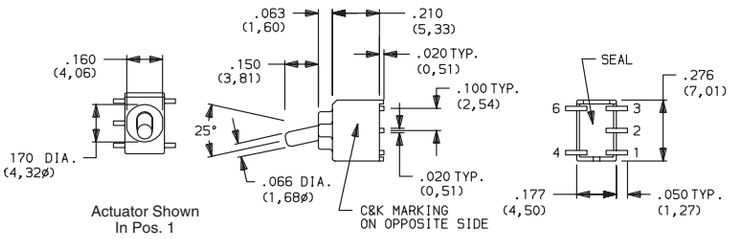
PART NUMBER	SWITCH FUNCTION POS.1	POS. 2	POS. 3
GT11MSABETR	ON	NONE	ON
GT13MSABETR	ON	OFF	ON
Conn. Terms.	2-3	OPEN	2-1
Schematic			
SPDT			
GT12MSABETR	OFF	NONE	ON
Conn. Terms.	OPEN	N/A	3-1
Schematic			
SPST			

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

GT12-omit pad 2.

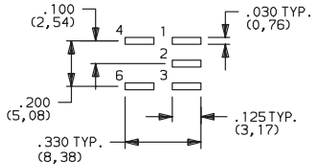


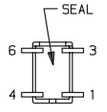
GT11MSCBE
SPDT



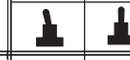
Actuator Shown
In Pos. 1

PC MOUNTING



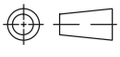


GT12 Models

PART NUMBER	SWITCH FUNCTION POS.1	POS. 2	POS. 3
GT11MSCBETR	ON	NONE	ON
GT13MSCBETR	ON	OFF	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 F-47.

GT12-omit pad 2.

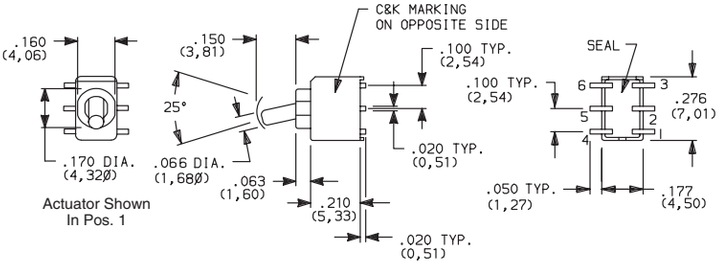


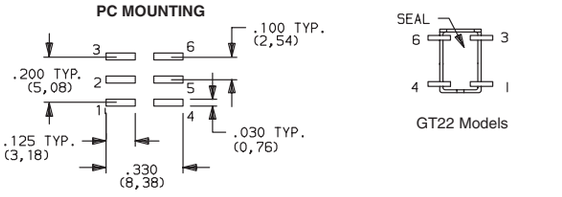
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change



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			



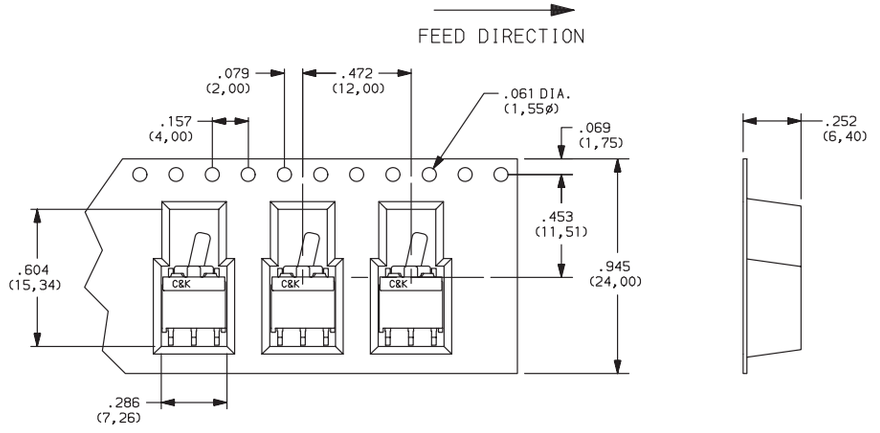


GT22-omit pads 2 & 5.

Standard with tape & reel packaging

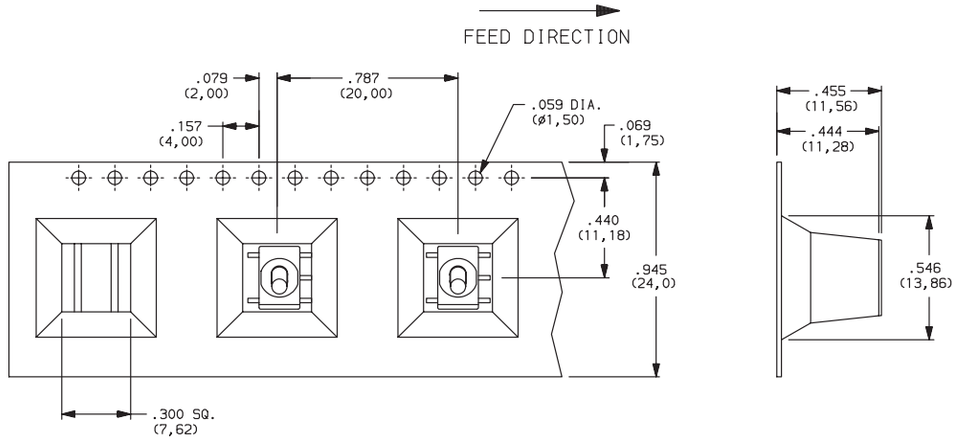
TAPE & REEL

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

Third Angle Projection

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