

NEW!

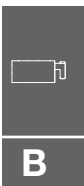
ITS Series Illuminated Tact Switch

Features/Benefits

- Vertical and right angle
- Thru-hole and SMT models
- Multiple caps and legends
- Several LED colors and bi-color options
- RoHS compliant /compatible

Typical Applications

- Consumer electronics
- Server/storage
- Medical devices
- Test/Measurement/Instrumentation
- Audio/Video
- Computers/Peripherals
- Security



Tactile Switches

Specification

FUNCTION: N.O. momentary action
 TERMINALS: SMT with positioning pegs, Thru-hole

Mechanical

OPERATING FORCE: 160gf ± 50gf
 OPERATING LIFE: 50,000 cycles (250m Ω max)
 RECOMMENDED OPERATING STROKE: 0.25mm ± 0.1mm

Electrical

RATING: 50mA @ 12VDC
 CONTACT RESISTANCE: <100m Ω (initial)
 DIELECTRIC WITHSTANDING VOLTAGE:
 >250VAC (50-60 Hz) between terminals - 1 min.Ω
 INSULATION RESISTANCE: >100M Ω
 BOUNCE TIME: <10ms

Packaging

Thru-hole: 200 pieces per tray
 SMT: tape & reel (see V2 or V3 mounting style drawings)

Environmental

OPERATING TEMPERATURE: -25°C to +70°C
 STORAGE TEMPERATURE: -25°C to +80°C

Process

SOLDERABILITY: Thru-hole - wave compatible
 SMT - convection or IR reflow compatible

Materials

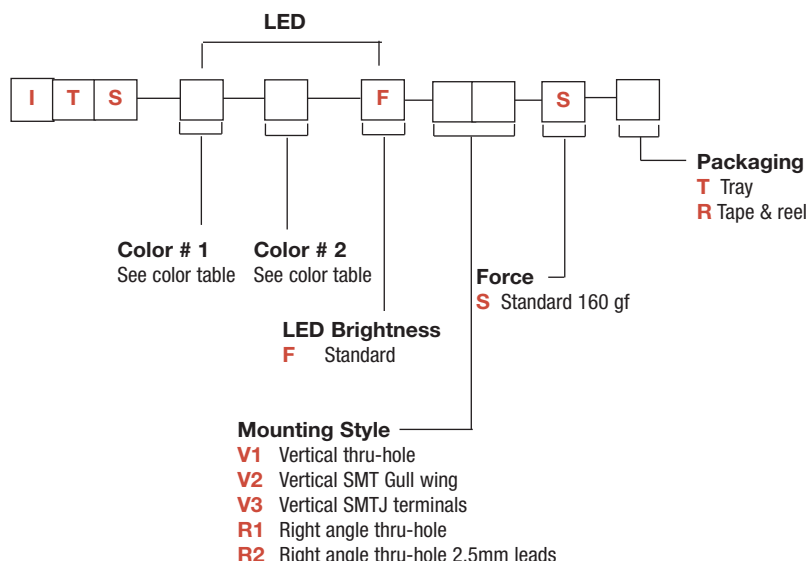
CONTACTS/TERMINALS: Base metal; brass
 Plating; Ag
 DOME: Base metal: Phosphor bronze
 Plating; Ag
 BASE: PA
 ACTUATOR: PA
 COVER: PA

Caps

Caps are ordered separately and shipped bulk. Thru-hole versions available with caps assembled under custom part number. Contact customer service for details.

How To Order

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.



LED Color	
00	No light
10	Red
12	Red/Yellow
13	Red/Green
14	Red/Blue
20	Yellow
21	Yellow/Red
23	Yellow/Green
30	Green
31	Green/Red
32	Green/Yellow
40	Blue
41	Blue/Red
50	White
60	True green

* Other colors available by request



Dimensions are shown: mm
 Specifications and dimensions subject to change

ITS Series Illuminated Tact Switch

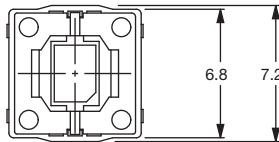
NEW!

LED COLOR / BRIGHTNESS

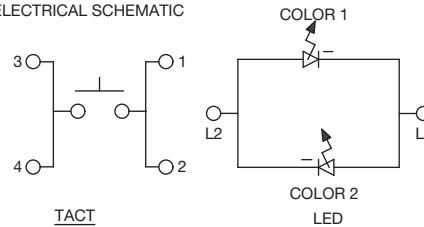
LED Characteristic	units	Standard LED Color Options					
		Red (1)	Green (2)	Yellow (3)	Blue (4)	White (5)	True Green (6)
Recommended Operating	mA @ 5VDC	20mA @ 5VDC	20mA @ 5VDC	20mA @ 5VDC	20mA @ 5VDC	20mA @ 5VDC	20mA @ 5VDC
Forward Current	mA	30 mA	30 mA	30 mA	30 mA	30 mA	30 mA
Peak Pulsing Current (1/8 duty @ 1kHz)	mA	125 mA	125 mA	125 mA	125 mA	125 mA	125 mA
Power Dissipation	mW	75 mW	75 mW	75 mW	108 mW	114 mW	108 mW
Forward Voltage @ 20A	Volts	2.5 Volts Max.	2.5 Volts Max.	2.5 Volts Max.	3.6 Volts Max.	3.6 Volts Max.	3.6 Volts Max.
Dominant Wavelength @ 20A	nm	637nm (Typical)	570nm (Typical)	590nm (Typical)	465nm (Typical)	465nm (Typical)	522nm (Typical)
Wavelength at Peak Emission @ 20A	nm	465nm (Typical)	573nm (Typical)	590nm (Typical)	460nm (Typical)	465nm (Typical)	515nm (Typical)
Spectral Half Bandwidth @ 20A	nm	20nm (Typical)	17nm (Typical)	20nm (Typical)	25nm (Typical)	465nm (Typical)	33nm (Typical)
Luminous Intensity @ 20mA	mcd	50mcd Minimum	40mcd Minimum	125mcd Minimum	100mcd Minimum	250mcd Minimum	500mcd Minimum
Viewing Angle at 50% LV (@10mA)	degrees	150° Typical	120° Typical	120° Typical	120° Typical	150° Typical	120° Typical

MOUNTING STYLES

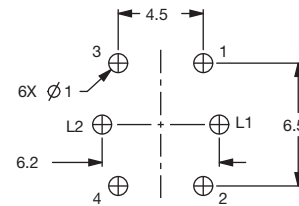
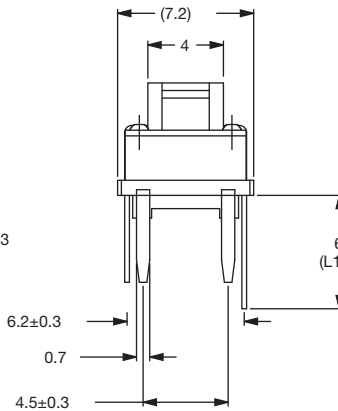
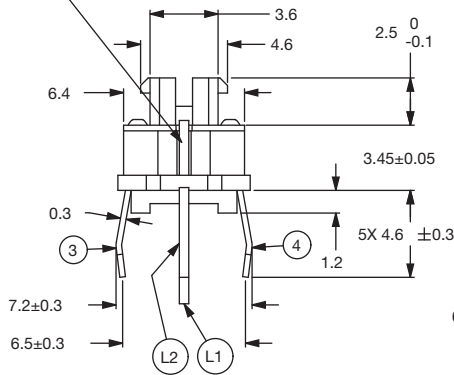
V1 - Vertical Thru-hole



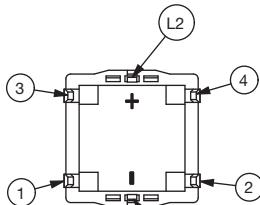
ELECTRICAL SCHEMATIC



DOT SHOWING LED COLOR IS MARKED FOR MINUS POLE SEE SCHEMATIC



P.C.B. LAYOUT



L1 LED TERMINAL L1 IS TRIMMED LONGER THAN TERMINAL L2

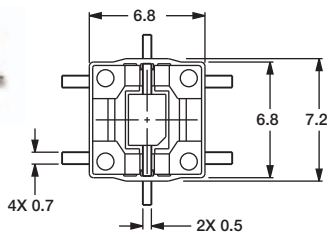
TRAY PACKAGING: 200 PIECES

NEW!

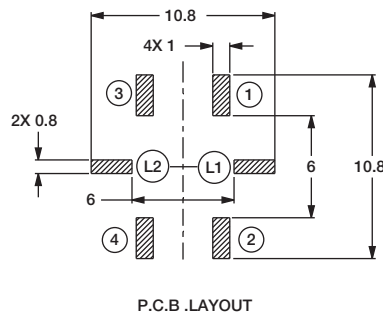
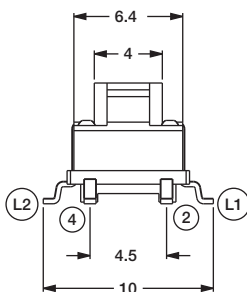
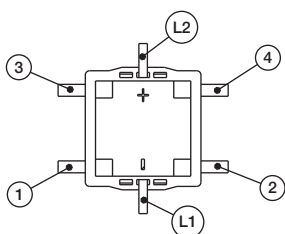
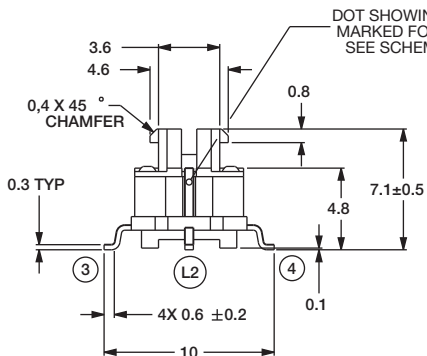
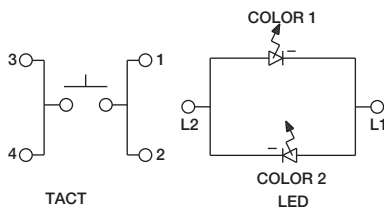
ITS Series Illuminated Tact Switch

MOUNTING STYLES

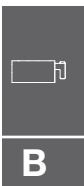
V2 - Vertical SMT; Gullwing



ELECTRICAL SCHEMATIC

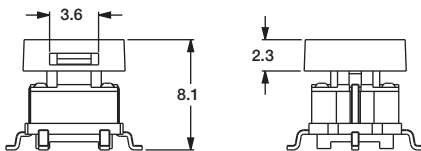
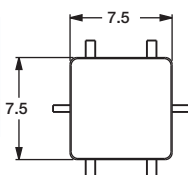


P.C.B. LAYOUT

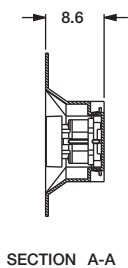
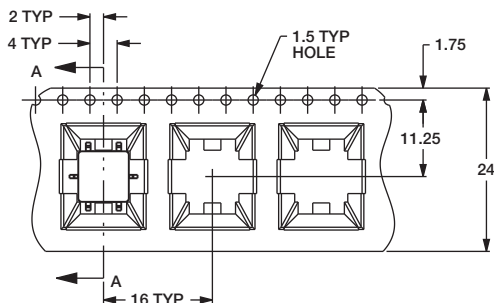


B

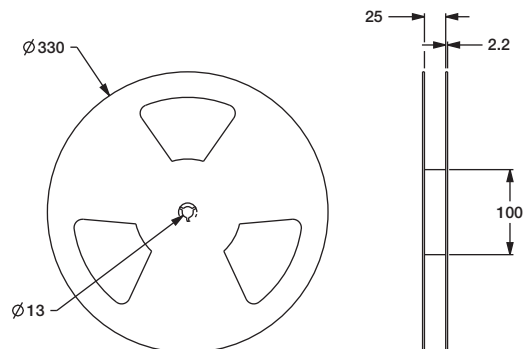
Tactile Switches



NOTES:
1. SWITCH WITH TEMPORARY PICK AND PLACE CAP.



TAPE & REEL: 500 PIECES



Dimensions are shown: mm
Specifications and dimensions subject to change

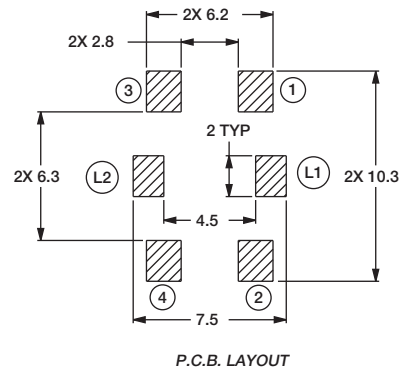
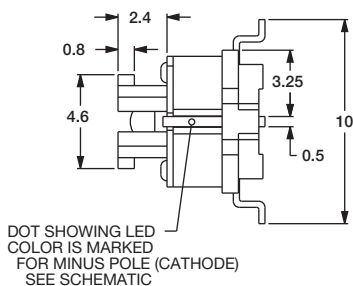
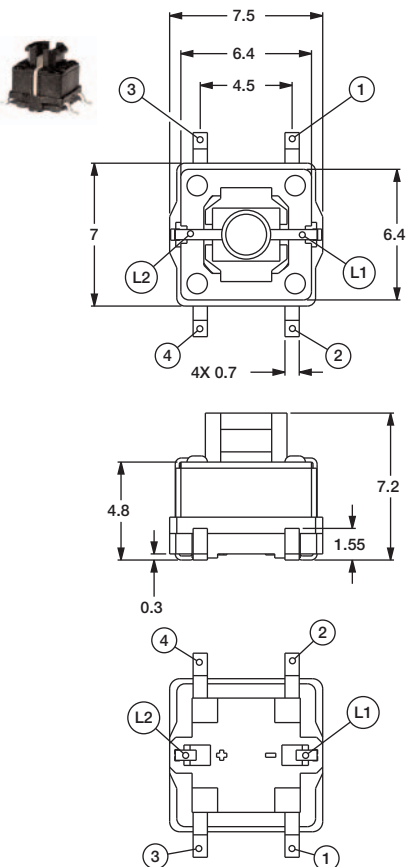
ITS Series Illuminated Tact Switch

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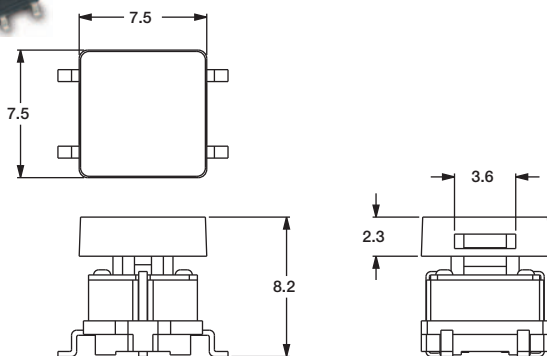
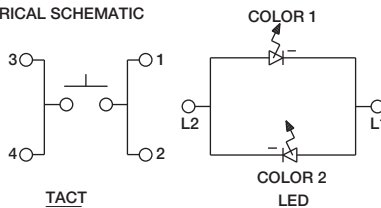
MOUNTING STYLES

V3 - Vertical SMT; J terminal

Tactile Switches



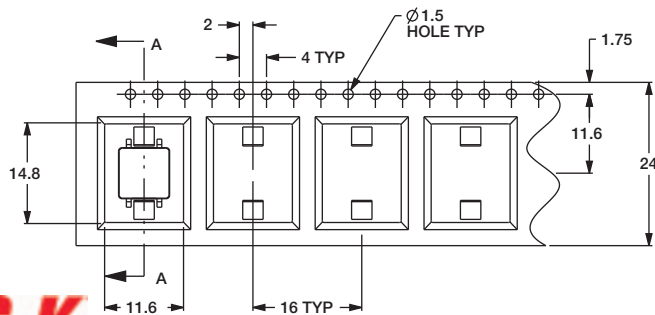
ELECTRICAL SCHEMATIC



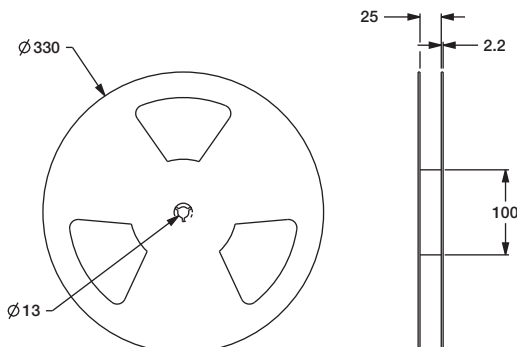
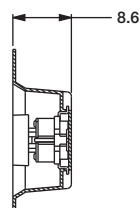
SCALE 3:1

TAPE & REEL: 500 PIECES

NOTES:
1. SWITCH WITH TEMPORARY PICK AND PLACE CAP.



SECTION A-A



Dimensions are shown: mm
Specifications and dimensions subject to change

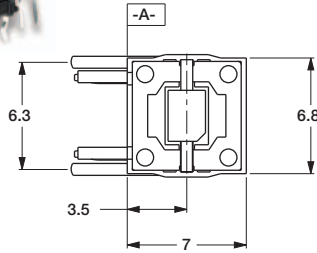


NEW!

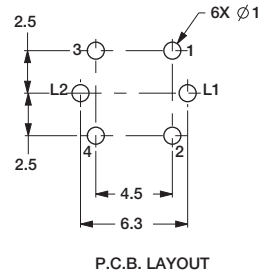
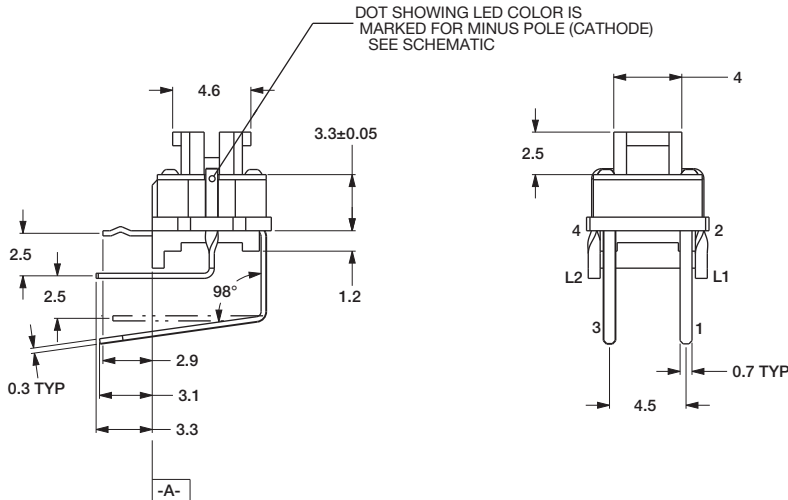
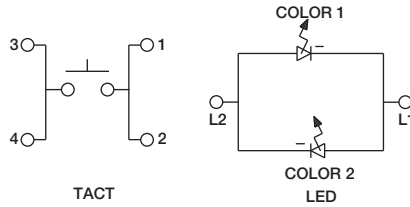
ITS Series Illuminated Tact Switch

MOUNTING STYLES

R1 - Right Angle; Thru-hole

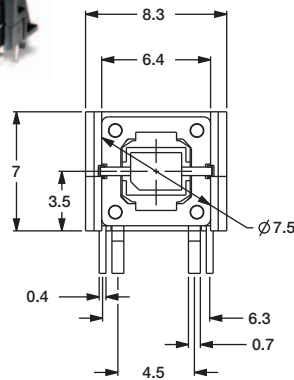


ELECTRICAL SCHEMATIC

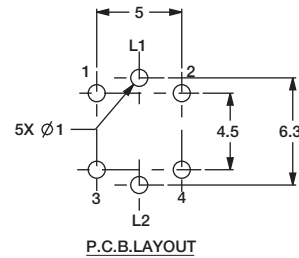
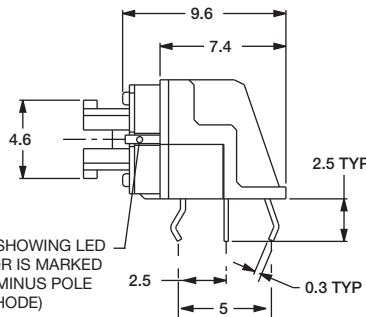


TRAY PACKAGING: 200 PIECES

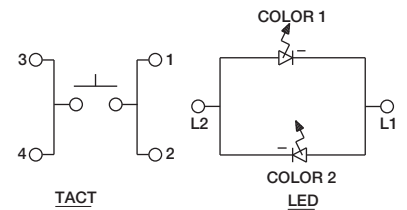
R2 - Right Angle; Thru-hole 2.5mm leads



DOT SHOWING LED COLOR IS MARKED FOR MINUS POLE (CATHODE) SEE SCHEMATIC



ELECTRICAL SCHEMATIC



TRAY PACKAGING: 200 PIECES



Dimensions are shown: mm
Specifications and dimensions subject to change

ITS Series Illuminated Tact Switch

NEW!

FORCE

OPTION CODE	FORCE
S	Standard 160 gf

CAPS

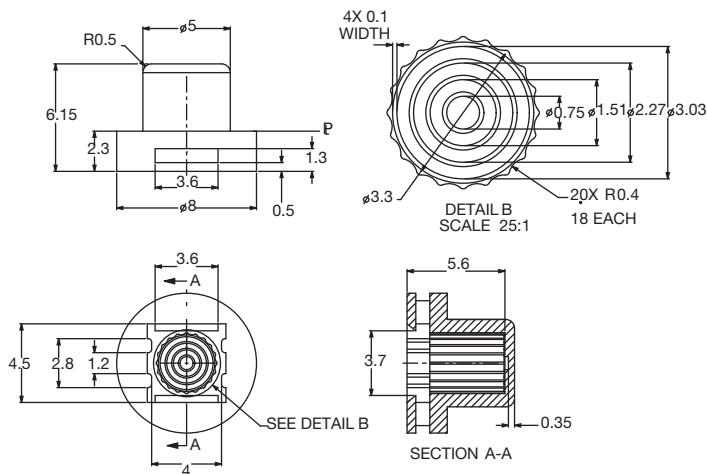
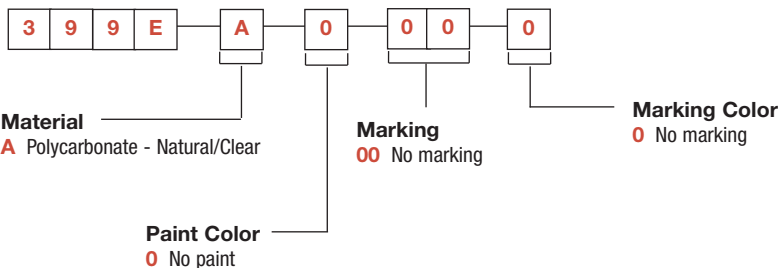
Tactile Switches

Use the individual ordering code for each cap



399EA0000

Round cap, clear



Dimensions are shown: mm
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NEW!

ITS Series Illuminated Tact Switch

CAPS



400ECB01E

Clear, silver paint laser etch
flat edge



400EC0000

Clear, gray tint,
flat edge



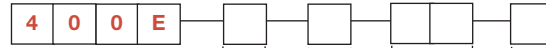
400EC001B

Clear gray tint
with black power symbol,
flat edge



400EB0000

Translucent, flat edge



Material

- A** Polycarbonate - Natural/Clear
- B** Polycarbonate - Translucent white
- C** Polycarbonate - Gray tint translucent

Paint Color

- 0** No paint
- A** Silver paint
- B** Gray tint

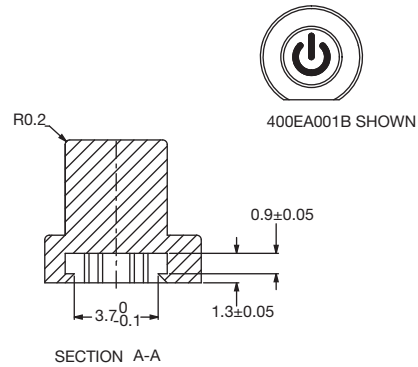
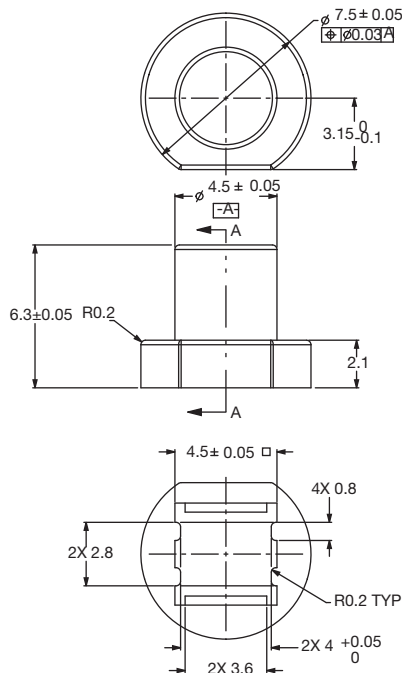
Marking

- 00** No marking
- 01** Power On/Off
- 04** Arrow right
- 05** Arrow left
- 06** Arrow up
- 07** Arrow down
- 09** Power
- 33** Arrow up (fill)
- 34** Arrow down (fill)
- 97** I/O



Marking Color

- 0** No marking
- A** Silver
- B** Black
- E** Laser etch (painted cap only)



ITSXXFR1ST &
400ECB01E cap



ITSXXFR2ST &
400EC001B cap



Dimensions are shown: mm
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ITS Series Illuminated Tact Switch

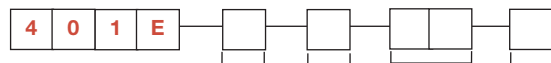
NEW!

CAPS



401EXXXXX

Tall oval



Material

- A** Polycarbonate - Natural/Clear
- B** Polycarbonate - Opaque white
- C** Polycarbonate - Gray tint translucent

Paint Color

- 0** No paint
- A** Silver paint
- B** Gray paint

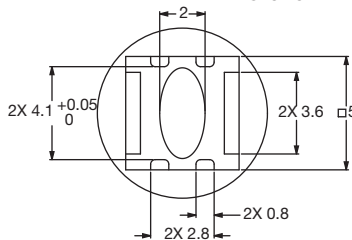
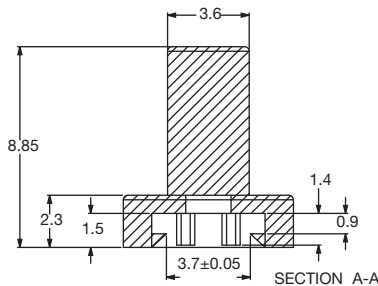
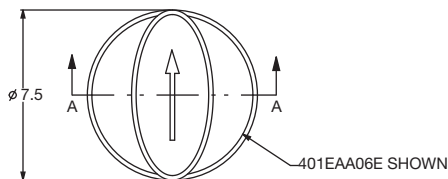
Marking

- 00** No marking
- 06** Arrow up
- 07** Arrow down
- 33** Arrow up (fill)
- 34** Arrow down (fill)



Marking Color

- 0** No marking
- A** Silver
- B** Black
- E** Laser etch (painted cap only)



MARKINGS

OPTION CODE	ILLUMINATION TYPE	
00	No marking	
01	Power ON/OFF	
04	Arrow Right	
05	Arrow Left	
06	Arrow Up	
07	Arrow Down	
09	Power	
33	Arrow Up (fill)	
34	Arrow Up (fill)	
97	I/O	I/O