Features/Benefits

- *Vertical and right angle SMT models*
- *Vertical and right angle thru-hole 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*

NEW Right Angle SMT



Specification

FUNCTION: N.O. momentary action
TERMINALS: SMT & Thru-hole

Mechanical

OPERATING FORCE: 160 ± 50gf for V1; V2; V3; R1; R2 models
220 ± 50 gf for R3 model
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

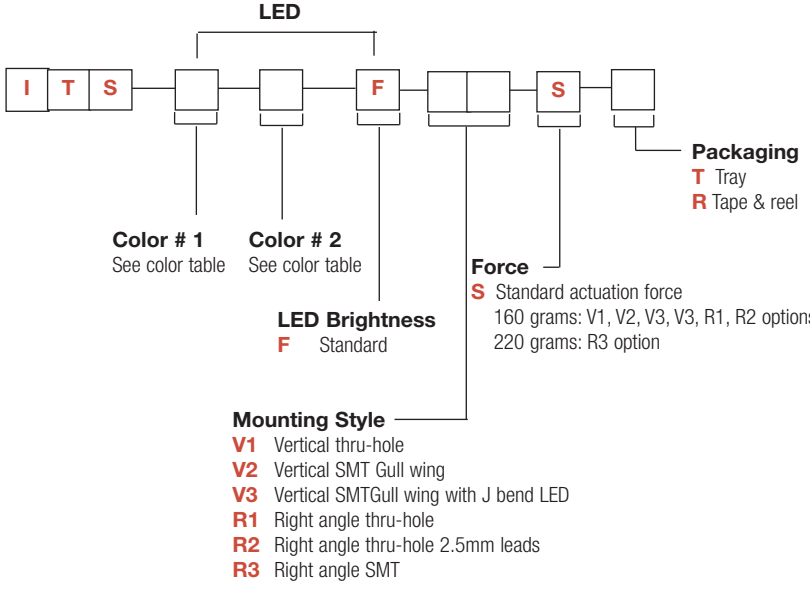
BASE: PA
ACTUATOR: PA
COVER: PA

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

ITS Series
Illuminated Tact Switch

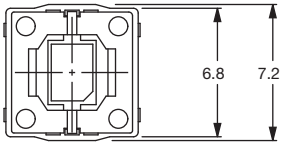
LED COLOR / BRIGHTNESS

LED Characteristic	units	Standard LED Color Options					
		Red (1)	Yellow (2)	Green (3)	Blue (4)	White (5)	True Green (6)
Recommended Operating	mA @ 5VDC	20mA	20mA	20mA	20mA	20mA	20mA
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	108 mW	108 mW
Forward Voltage @ 20mA	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 @ 20mA	nm	637nm (Typical)	590nm (Typical)	570nm (Typical)	465nm (Typical)	CIE Coordinates X= 0.25 ˜ 0.33 Y= 0.24 ˜ 0.34	522nm (Typical)
Wavelength at Peak Emission @ 20mA	nm	645nm (Typical)	590nm (Typical)	573nm (Typical)	460nm (Typical)		515nm (Typical)
Spectral Half Bandwidth @ 20mA	nm	20nm (Typical)	20nm (Typical)	17nm (Typical)	25nm (Typical)		33nm (Typical)
Luminous Intensity @ 20mA	mcd	50mcd Minimum	125mcd Minimum	40mcd 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

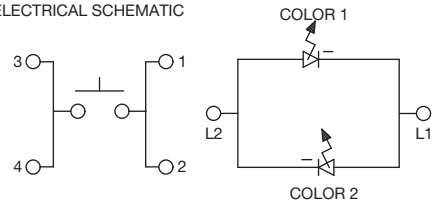
MOUNTING STYLES

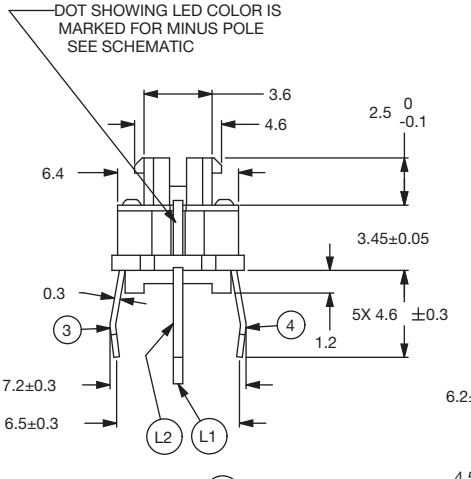
V1 - Vertical Thru-hole

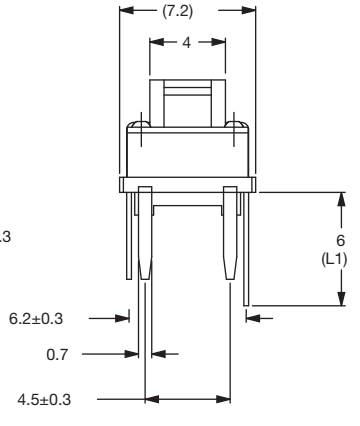


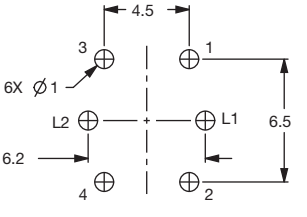


ELECTRICAL SCHEMATIC

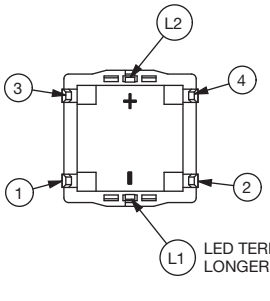








P.C.B. LAYOUT

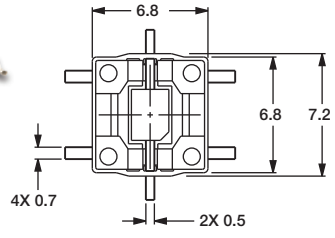


TRAY PACKAGING: 200 PIECES

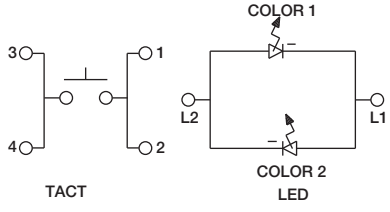
MOUNTING STYLES

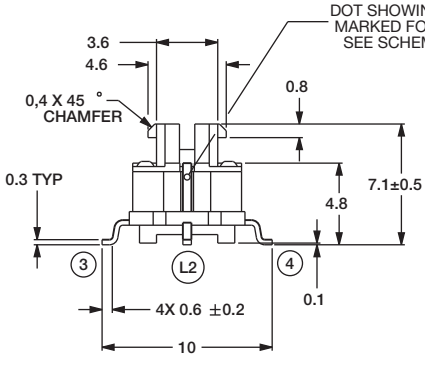
V2 - Vertical SMT; Gullwing

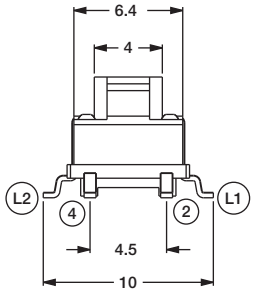


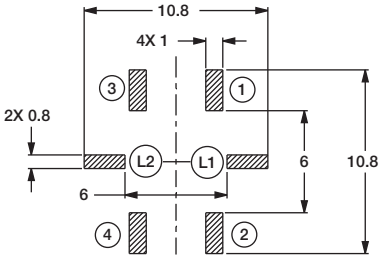


ELECTRICAL SCHEMATIC

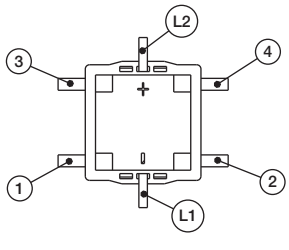




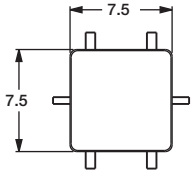




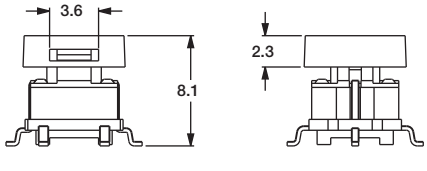
P.C.B .LAYOUT



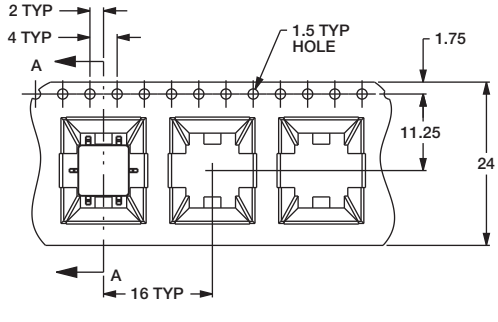


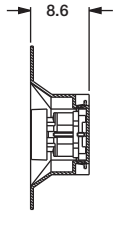


TAPE & REEL: 500 PIECES

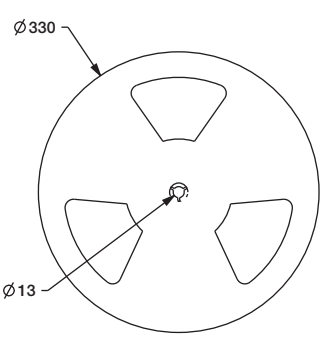


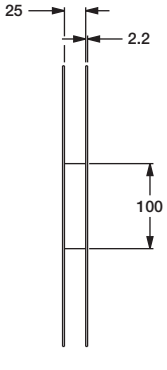
NOTES:
1. SWITCH WITH TEMPORARY PICK AND PLACE CAP.





SECTION A-A



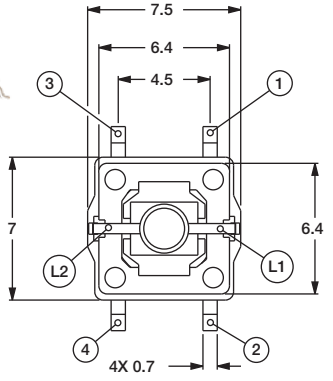


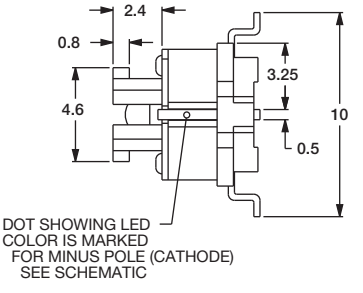
ITS Series
Illuminated Tact Switch

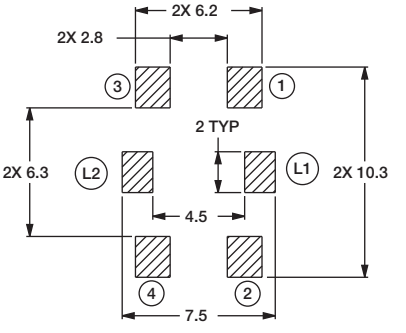
MOUNTING STYLES

V3 - Vertical SMT; Gull wing with J bend LED

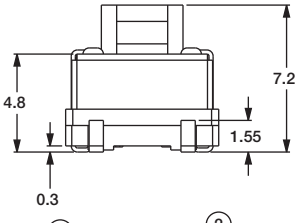




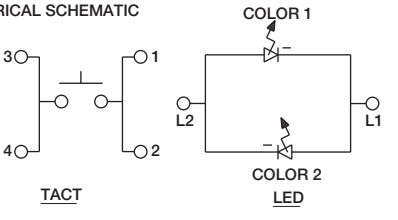


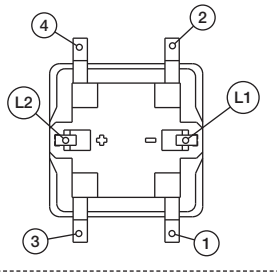


P.C.B. LAYOUT

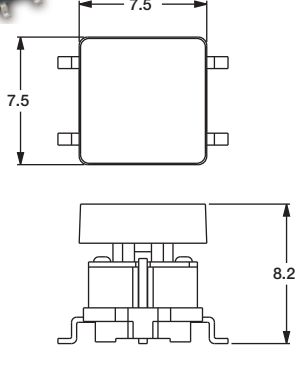


ELECTRICAL SCHEMATIC

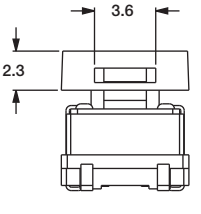






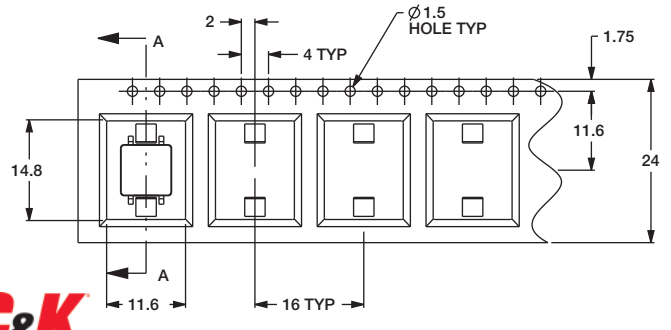


SCALE 3:1

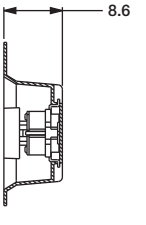


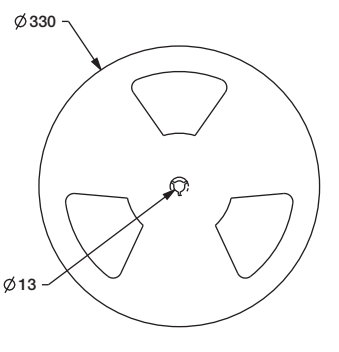
TAPE & REEL: 500 PIECES

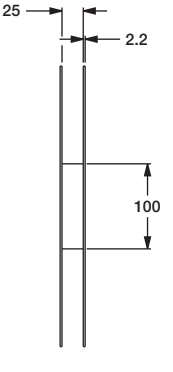
NOTES:
1. SWITCH WITH TEMPORARY PICK AND PLACE CAP.



SECTION A-A





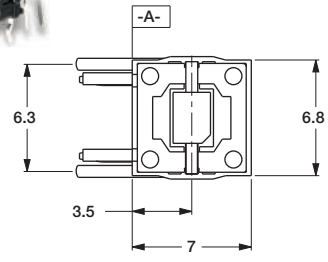


Dimensions are shown: mm
Specifications and dimensions subject to change

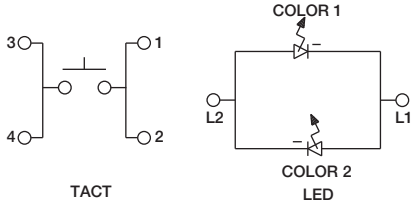
MOUNTING STYLES

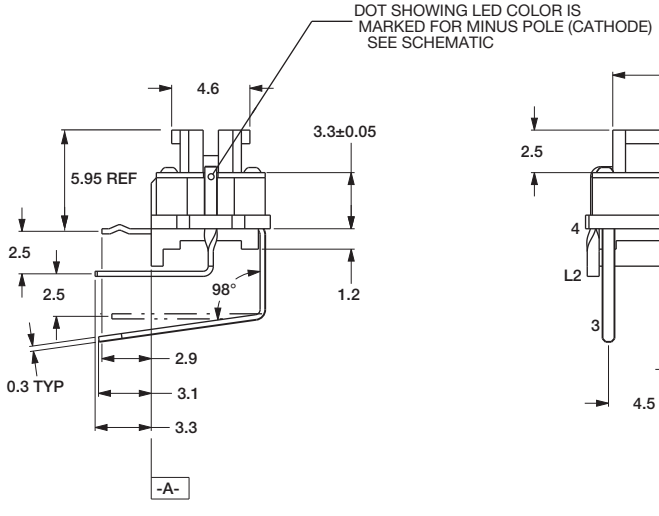
R1 - Right Angle; Thru-hole

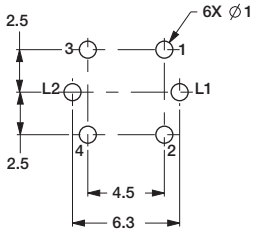




ELECTRICAL SCHEMATIC





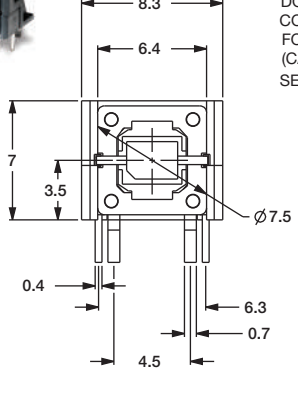


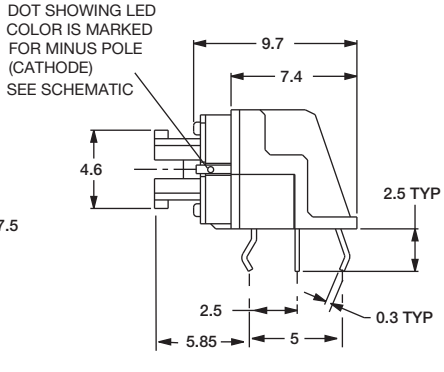
P.C.B. LAYOUT

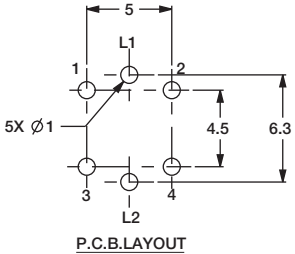
TRAY PACKAGING: 200 PIECES

R2 - Right Angle; Thru-hole 2.5mm leads

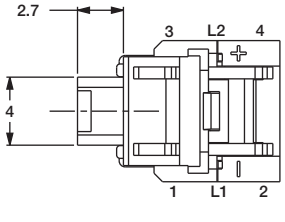




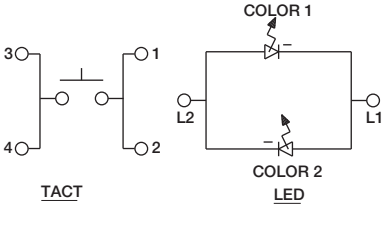




P.C.B.LAYOUT



ELECTRICAL SCHEMATIC

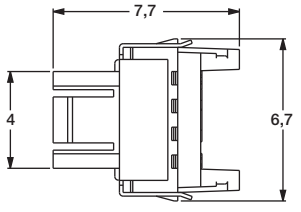


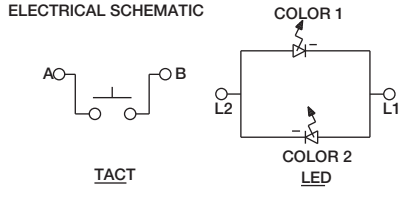
TRAY PACKAGING: 200 PIECES

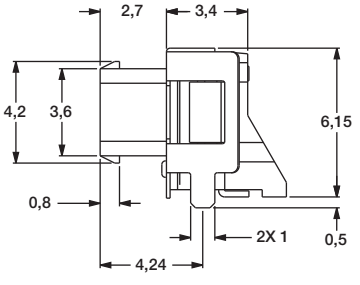
MOUNTING STYLES

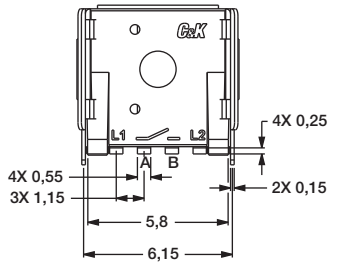
R3 - Right Angle, SMT

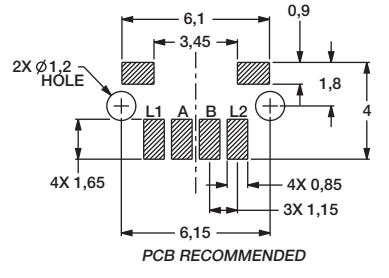




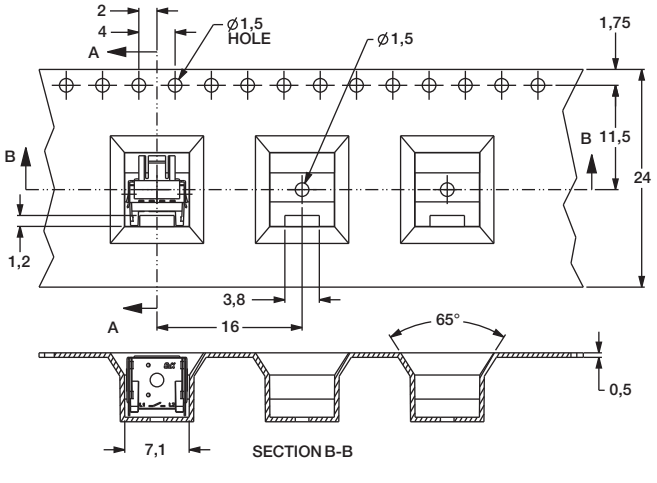


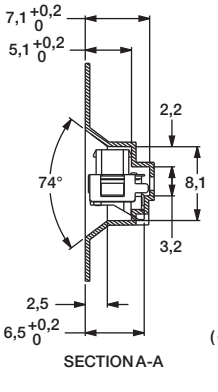


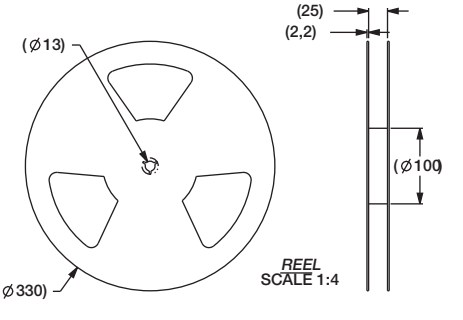




TAPE & REEL: 500 PIECES







FORCE

OPTION CODE	FORCE
S	Standard 160 gf - V1, V2, V3, R1, R2 options 220 gf - R3 option

CAPS

Use the individual ordering code for each cap



399EA0000

Round cap, clear

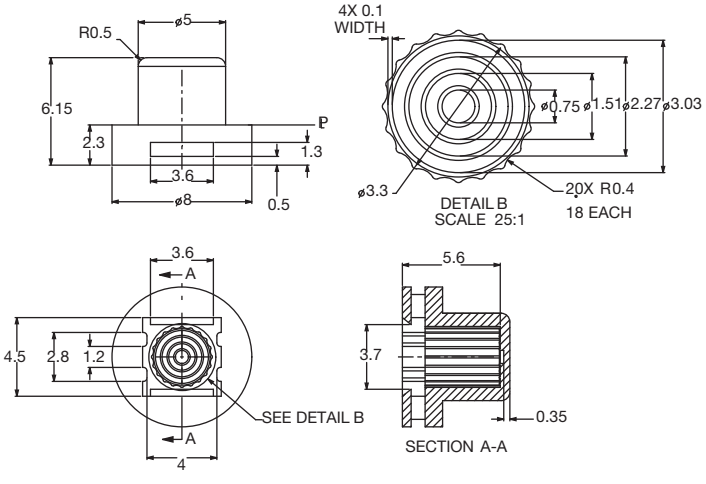
3	9	9	E	A	0	0	0	0

Material
A Polycarbonate - Natural/Clear

Paint Color
0 No paint

Marking
00 No marking

Marking Color
0 No marking



ITS Series
Illuminated Tact Switch

CAPS



400EA0000

Natural/clear



400EB0000

Translucent white, flat edge



400ECA01E

Matte silver paint laser etch, flat edge

4	0	0	E					

Material
- **A** Natural/Clear - polycarbonate
- **B** Translucent white - polycarbonate
- **C** Silver paint laser etch - polcarbonate

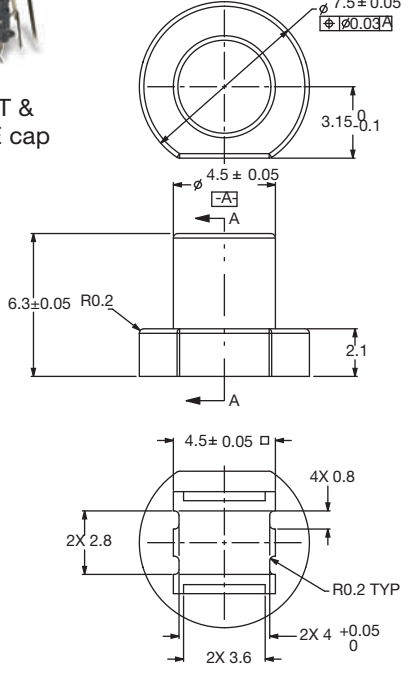
Paint Color
- **0** No paint
- **A** Matte silver

Laser Etch 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
- **E** Laser etch (painted caps only)

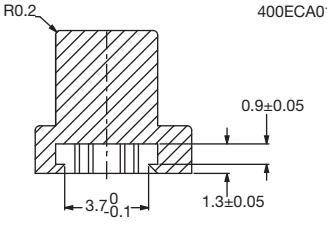


ITSXXFR1ST &
400ECA01E cap





400ECA01E SHOWN



SECTION A-A

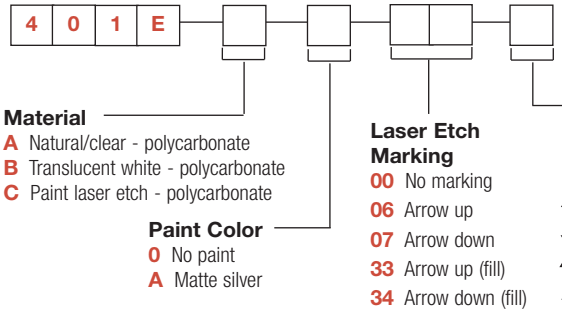
400E cap dimensions shown are "as molded" (no paint).

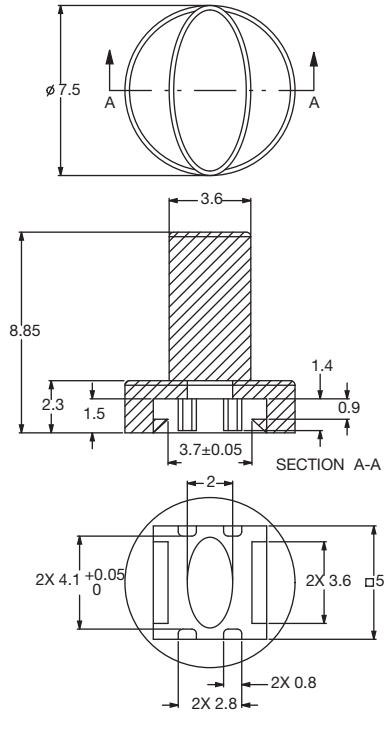
CAPS



401ECA06E

Matte silver paint, laser etch, tall oval





401E cap dimensions shown are "as molded" (no paint).