

8

7

6

5

4

3

2

1

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LOCAD

DIST00

REV

DESCRIPTION

DATE

DWN

APVD

Component name

Base material

Finish

Case

LCP, black, UL94 V-0

Terminal, wire lug (gold)

Brass

Gold over nickel

Terminal, PC, RA & VRA (gold)

Brass

Gold over nickel in contact area, Tin over nickel in solder area

Terminal, PC & wire lug (silver)

Silver clad copper

Silver over nickel

Contact (gold)

Copper alloy or brass

Gold over nickel

Contact (silver)

Silver clad copper or copper

Silver over nickel

Frame

Steel

Tin over copper

Spring

Music wire

Plunger Button

Nylon 6/6, black, red or blue. UL94 HB (extended) or UL94V-2 (flush)

Support bracket (RA*ES versions only)

Brass

Tin over copper

Support bracket, VRA

Steel

Tin over copper

Bushing

Brass

Nickel over copper

ES Housing (ES versions)

Nylon 6/6, natural, UL94 V-2

ES boot (ES versions)

Vinyl plastisol, black

Specifications

Rating

Gold: .4VA max. @ 20VDC or peak AC resistive

Silver: 1 A @ 125VAC or 28 VDC resistive

Initial termination resistance

20 milliohms max.

Insulation resistance

1,000 Megohms min @ 500 VDC

Dielectric strength

1,000 volts RMS at sea lever

Timing

Break before make

Plunger travel

.030

Actuation force

50 to 400 grams

Life expectancy

.4 VA, 1 pole: 100,000

.4 VA, 2 poles: 80,000

1 A, 1 pole: 60,000

1 A, 2 poles: 50,000

Operating temperature

-30° C to +65° C

Storage temperature

-30° C to +65° C

Terminal seal

Single pole: epoxy

Double pole: epoxy optional

Model

Actuator

Poles

Rating

Function

Plating

Terminations

Process Seal

Button color

04

TPB

Blank = extended

1

1 = Gold .4VA

C = SPST momentary

G = Gold

Blank = Wire lug

ES = process sealed 2

0 = Black

F = flush

2 (1+1)

3 = Silver 1 Amp 1

F = SPDT momentary

Blank = Silver 1

PC = printed circuit

2 = Red

2

M = DPST momentary

RA = right angle 2

6 = Blue

R = DPDT momentary

VRA = vertical right angle 3

NOTES:

1. Silver only available in wire lug and pc terminations

2. RAES available with B and C bushing only

3. VRA only available in single pole

P/N

Alco P/N

Flush Actuator?

Poles

Throws

Plating

Terminals

Process sealed?

Button Color

Function

Connected Terminals

Dim A

1825097-1

TPB11CGPC004

no

1

1

Gold

PC

No

Black

Off

Mom

Off

1-3

.133

1825097-2

TPB11CGPC204

no

1

1

Gold

PC

No

Red

Off

Mom

Off

1-3

.133

1825097-3

TPB11CGPCES004

no

1

1

Gold

PC

yes

Black

Off

Mom

Off

1-3

.133

1825097-6

TPB11CGRA004

no

1

1

Gold

Right Angle

No

Black

Off

Mom

Off

1-3

.133

1825097-4

TPB11CGRA204

no

1

1

Gold

Right Angle

No

Red

Off

Mom

Off

1-3

.133

1825097-5

TPB11CGRAES004

no

1

1

Gold

Right Angle

yes

Black

Off

Mom

Off

1-3

.133

1825097-7

TPB11CGRAES204

no

1

1

Gold

Right Angle

yes

Red

Off

Mom

Off

1-3

.133

1825097-8

TPB11CGVRA004

no

1

1

Gold

VRA

No

Black

Off

Mom

Off

1-3

.117

1825097-9

TPB11FGPC004

no

1

2

Gold

PC

No

Black

On

Mom

1-2

2-3

.133

1-1825097-0

TPB11FGPCES204

no

1

2

Gold

PC

yes

Red

On

Mom

1-2

2-3

.133

1-1825097-1

TPB11FGRA004

no

1

2

Gold

Right Angle

No

Black

On

Mom

1-2

2-3

.133

1-1825097-2

TPB11FGRA204

no

1

2

Gold

Right Angle

No

Red

On

Mom

1-2

2-3

.133

1-1825097-3

TPB11FGRA604

no

1

2

Gold

Right Angle

No

Blue

On

Mom

1-2

2-3

.133

1-1825097-4

TPB11FGRAES004

no

1

2

Gold

Right Angle

yes

Black

On

Mom

1-2

2-3

.133

1-1825097-5

TPB11FGRAES604

no

1

2

Gold

Right Angle

yes

Blue

On

Mom

1-2

2-3

.133

1-1825097-6

TPB11FGVRA004

no

1

2

Gold

VRA

No

Black

On

Mom

1-2

2-3

.117

1-1825097-7

TPB21MGPC004

no

2

1

Gold

PC

No

Black

Off

Mom

Off

1-3, 4-6

.133

1-1825097-8

TPB21MGPC204

no

2

1

Gold

PC

No

Red

Off

Mom

Off

1-3, 4-6

.133

2-1825097-8

TPB21MGRA004

no

2

1

Gold

Right Angle

No

Black

Off

Mom

Off

1-3, 4-6

.133

1-1825097-9

TPB21RGRA004

no

2

2

Gold

Right Angle

No

Black

On

Mom

1-2, 4-5

2-3, 5-6

.133

2-1825097-0

TPBF11CGPCES004

yes

1

1

Gold

PC

yes

Black

Off

Mom

Off

1-3

.000

2-1825097-1

TPBF11CGRA004

yes

1

1

Gold

Right Angle

No

Black

Off

Mom

Off

1-3

.000

2-1825097-2

TPBF11CGRAES004

yes

1

1

Gold

Right Angle

yes

Black

Off

Mom

Off

1-3

.000

2-1825097-3

TPBF11FGPCES004

yes

1

2

Gold

PC

yes

Black

On

Mom

1-2

2-3

.000

2-1825097-4

TPBF11FGRA004

yes

1

2

Gold

Right Angle

No

Black

On

Mom

1-2

2-3

.000

2-1825097-5

TPBF11FGRA204

yes

1

2

Gold

Right Angle

No

Red

On

Mom

1-2

2-3

.000

2-1825097-6

TPBF11FGRAES004

yes

1

2

Gold

Right Angle

yes

Black

On

Mom

1-2

2-3

.000

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

MATERIAL

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ± -

1 PLC ± -

2 PLC ± -

3 PLC ± .010

4 PLC ± -

ANGLES ± -

FINISH

DWN

M.BINNER

20JUL05

CHK

M.ZITTO

21JUL05

APVD

M.ZITTO

21JUL05

NAME

PRODUCT SPEC

APPLICATION SPEC

SIZE

CAGE CODE

DRAWING NO

RESTRICTED TO

TE Connectivity

PUSHBUTTON SWITCH, TPB SERIES

100779

1825097

CUSTOMER DRAWING

SCALE 4:1

SHEET 1 OF 6

REV A2

NOTES:

1. TERMINAL NUMBERS ARE FOR REFERENCE ONLY AND DO NOT APPEAR ON SWITCHES.

2. ALL MATERIALS AND FINISHES COMPLY WITH EU DIRECTIVE 2002/95/EC OF 27JAN2003 (ROHS).

3. DISPOSABLE BOOT SUPPLIED WITH ES VERSIONS. BOOT TO BE PLACED OVER BUSHING BEFORE SOLDER WASHING.

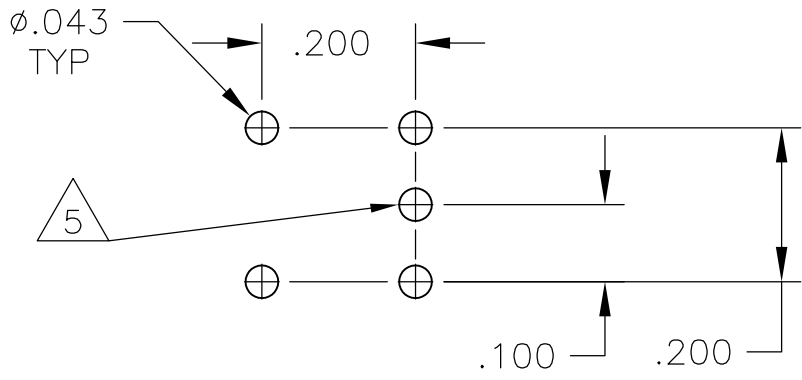
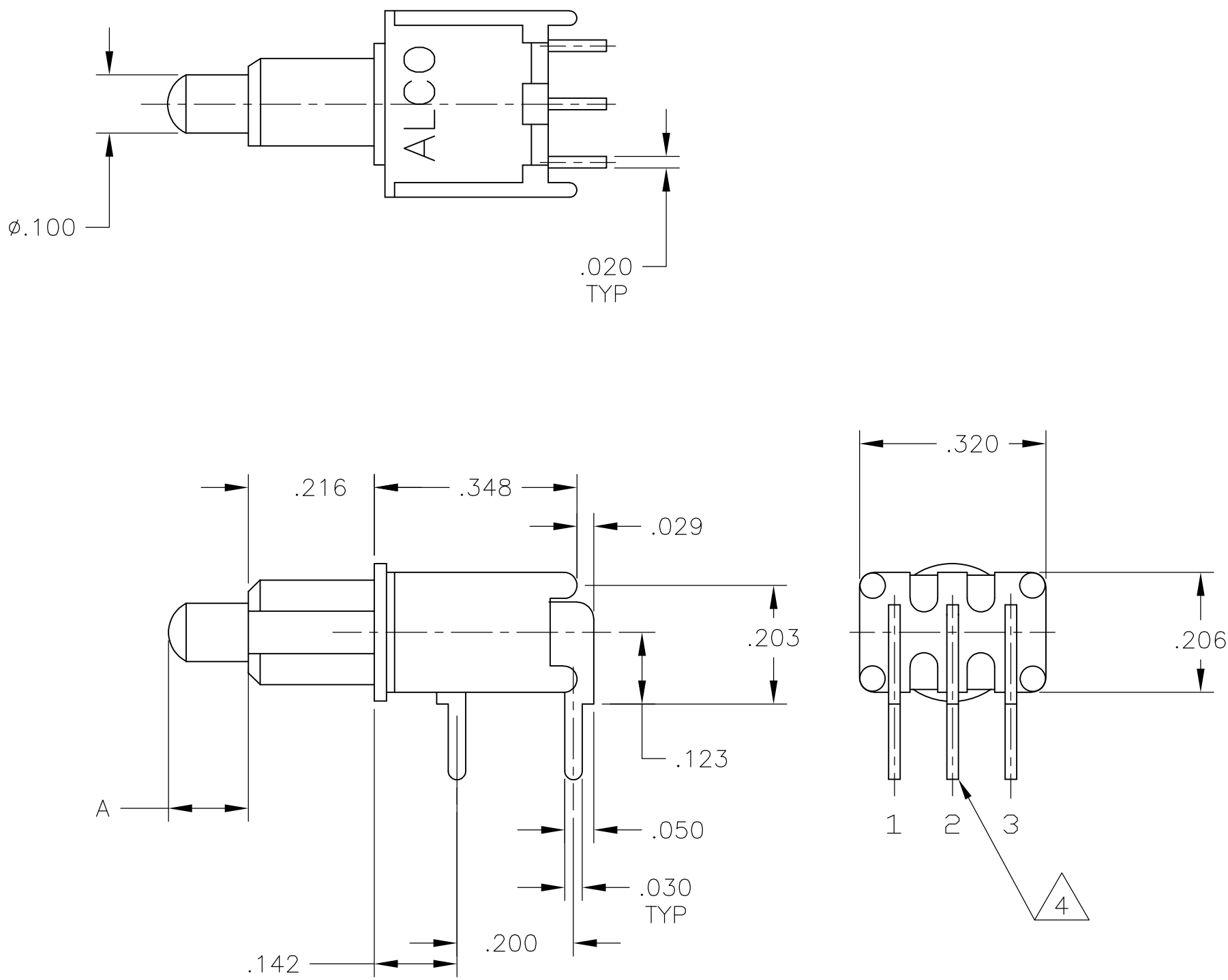
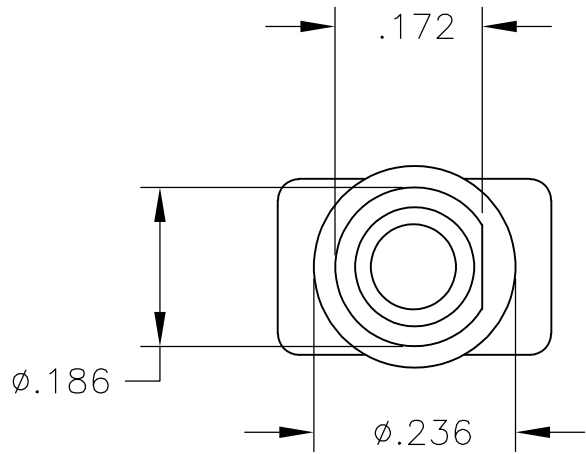
4. CENTER TERMINAL PRESENT ON DOUBLE THROW SWITCHES ONLY.

5. CENTER HOLE REQUIRED ON DOUBLE THROW SWITCHES ONLY.

6. OBSOLETE.

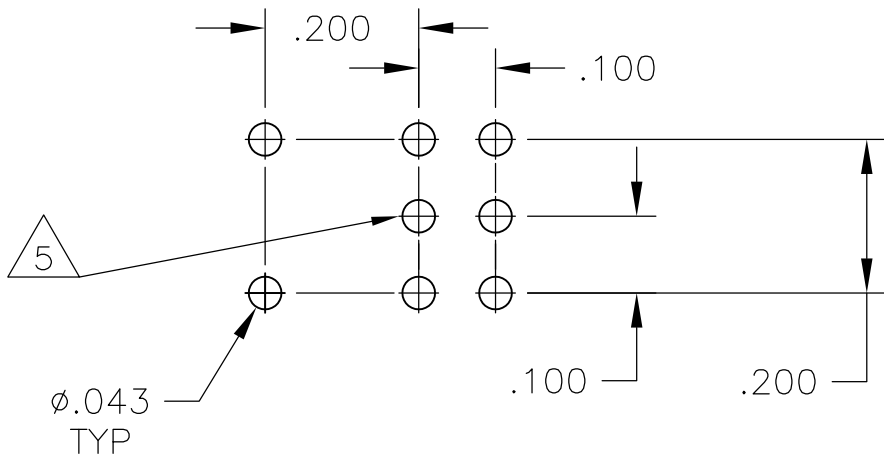
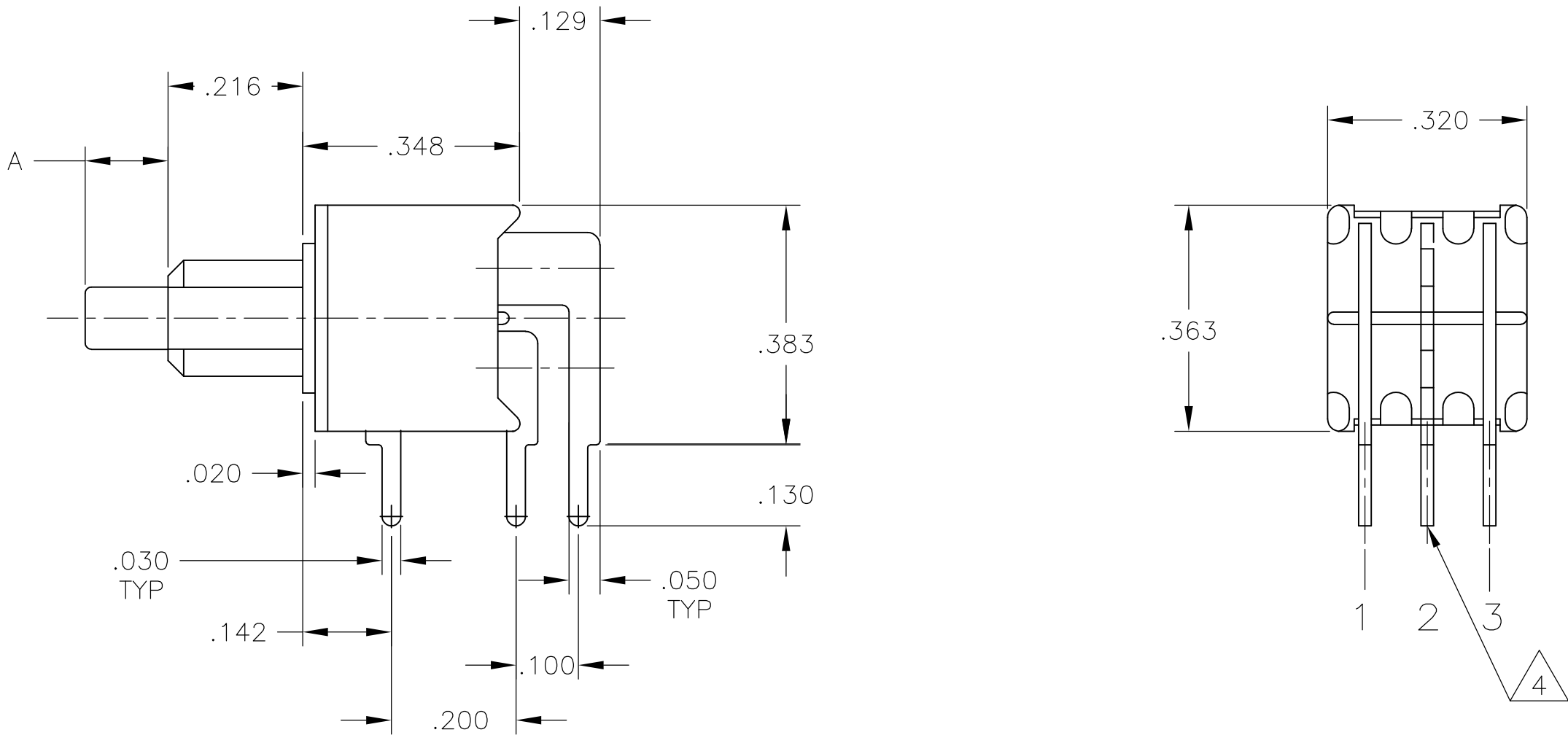
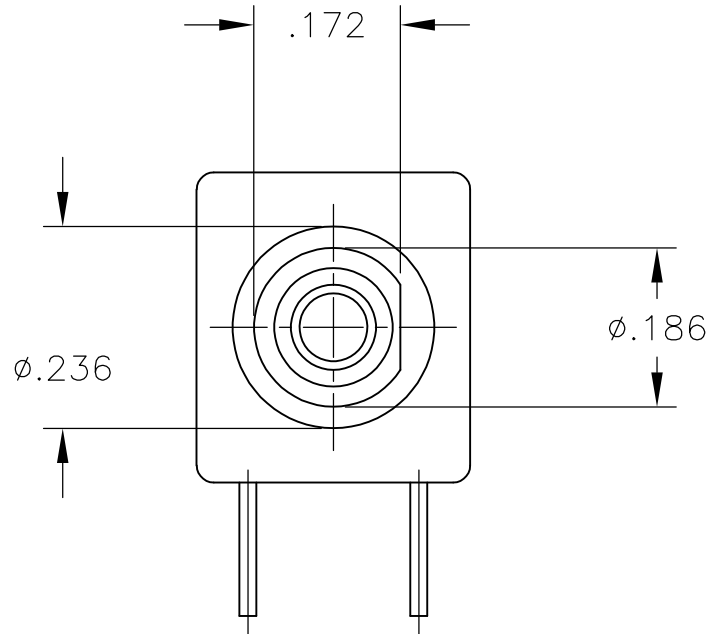
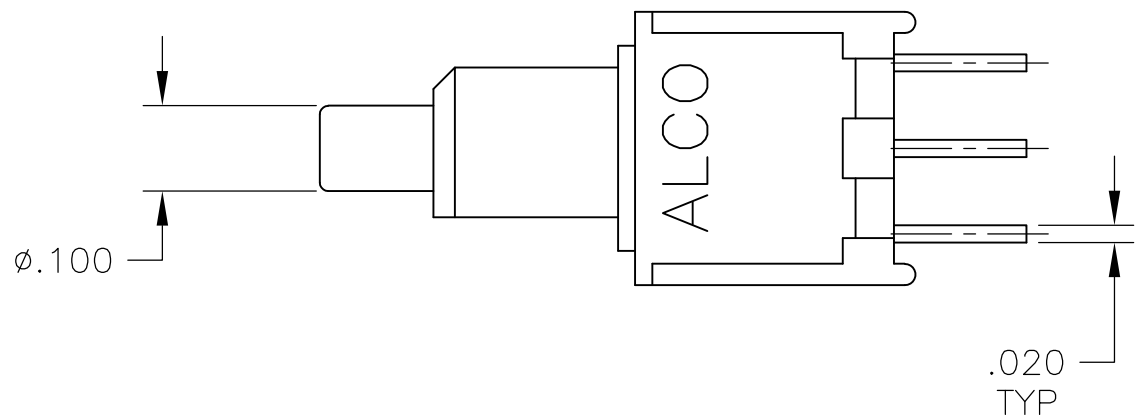
4805 (3/11)

LOC		DIST		REVISIONS			
P	L	T	R	DESCRIPTION	DATE	DWN	APVD
AD	—	—	—	SEE SHEET 1	—	—	—



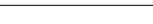
PCB HOLE LAYOUT

TPB11CGRA & TPB11FGRA
TPBF11CGRA & TPBF11FGRA

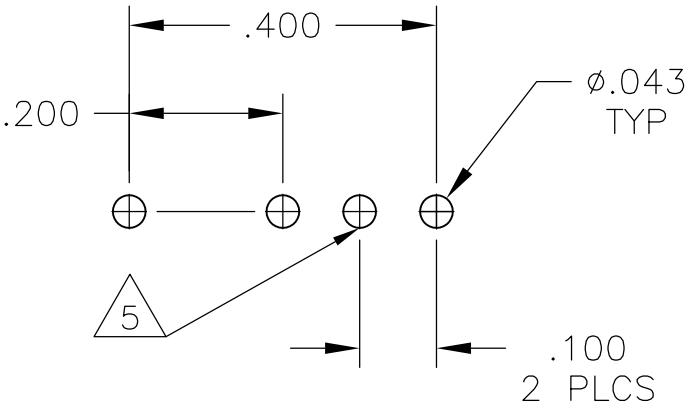
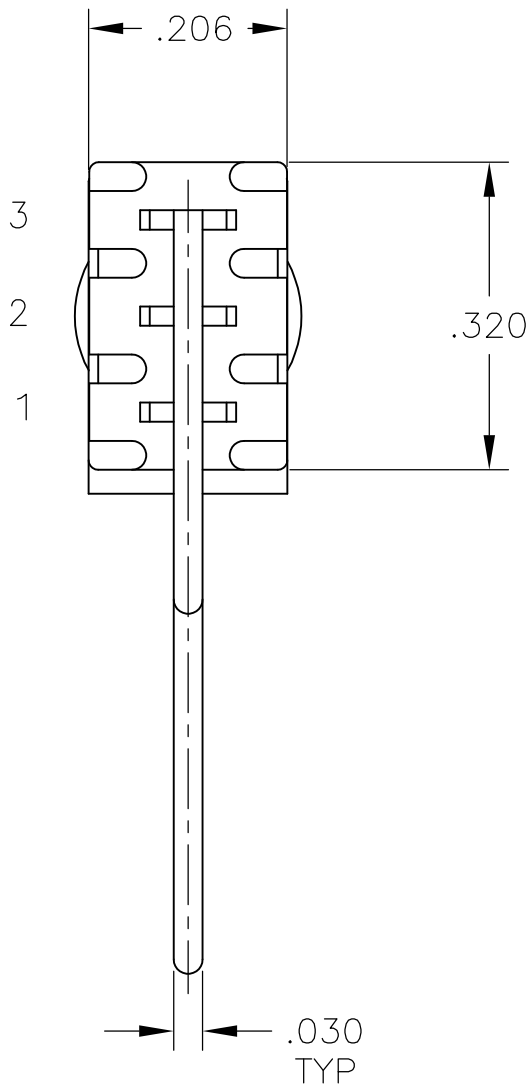
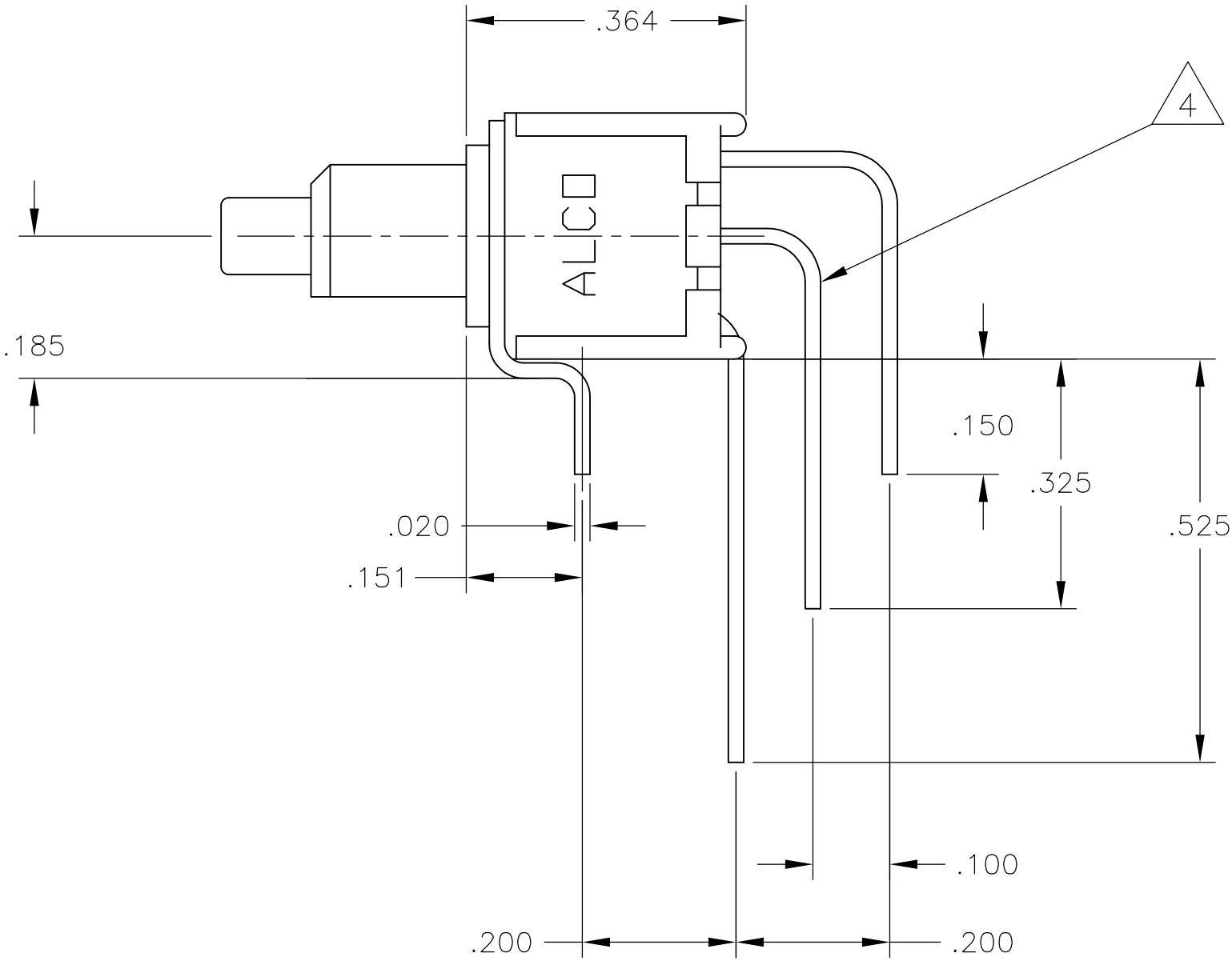
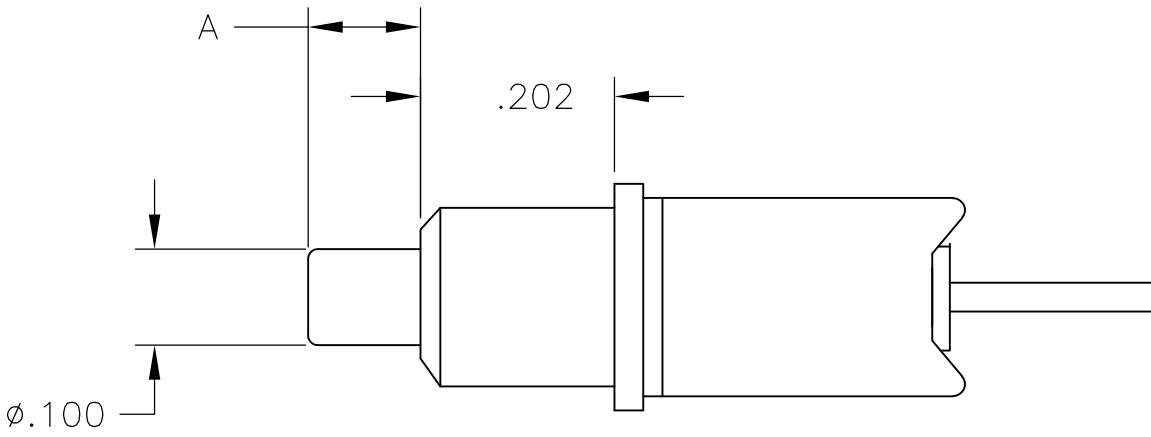
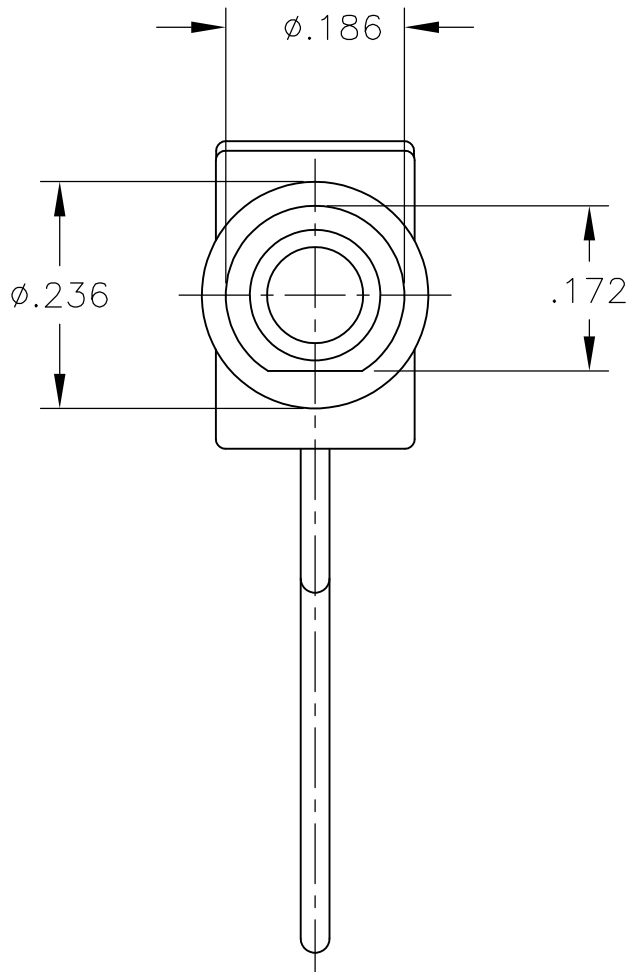


PCB HOLE LAYOUT

TPB21MGRA & TPB21RGRA

THIS DRAWING IS A CONTROLLED DOCUMENT.				DWN M. BINNER	20JUL05	 TE Connectivity			
				CHK M. ZITTO	21JUL05				
DIMENSIONS: INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED:		AP'D M. ZITTO	21JUL05	NAME PUSHBUTTON SWITCH, TPB SERIES			
				PRODUCT SPEC —					
		ANGLES ± ±		APPLICATION SPEC —		SIZE A1		CAGE CODE 00779	
				RESTRICTED TO —					
MATERIAL —		FINISH —		WEIGHT —		DRAWING NO C1825097		REV A2	
				CUSTOMER DRAWING					
				SCALE 4:1		SHEET 3 OF 6			

LOC	DIST	REVISIONS				
AD	—	REV	LTR	DESCRIPTION	DATE	DWN
		—	—	SEE SHEET 1	—	—

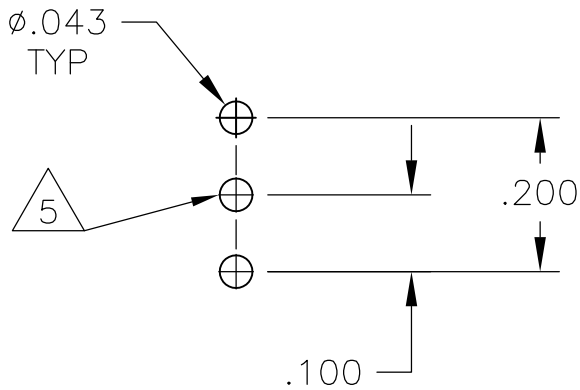


PCB HOLE LAYOUT

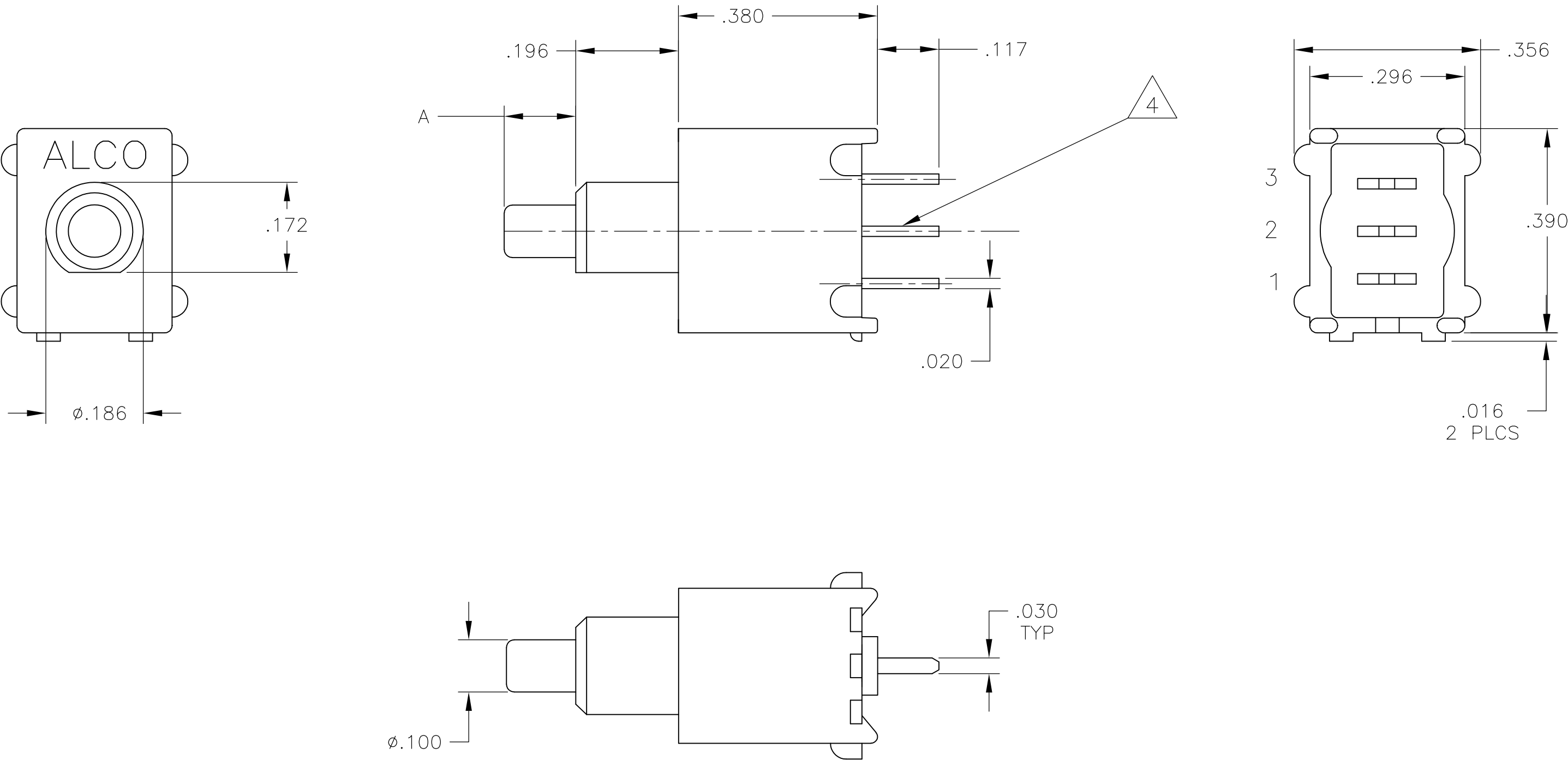
TPB11CVRA & TPB11FGVRA

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN M. BINNER	20JUL05	TE Connectivity	
		CHK M. ZITTO	21JUL05		
DIMENSIONS: INCHES	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APP'D M. ZITTO	21JUL05	NAME PUSHBUTTON SWITCH, TPB SERIES	
		PRODUCT SPEC		—	
	0. PLC ± — 1. PLC ± — 2. PLC ± — 3. PLC ± .010 4. PLC ± — ANGLES FINISH	APPLICATION SPEC		—	
		—		—	
MATERIAL —	—	WEIGHT —	—	SIZE A1	CAGE CODE 00779
		DRAWING NO. 1825097		RESTRICTED TO —	
		CUSTOMER DRAWING		SCALE 4:1	SHEET 4 OF 6
				REV A2	

LOC	DIST	REVISIONS				
AD	—	P	LTR	DESCRIPTION	DATE	DWN
		—		SEE SHEET 1	—	—



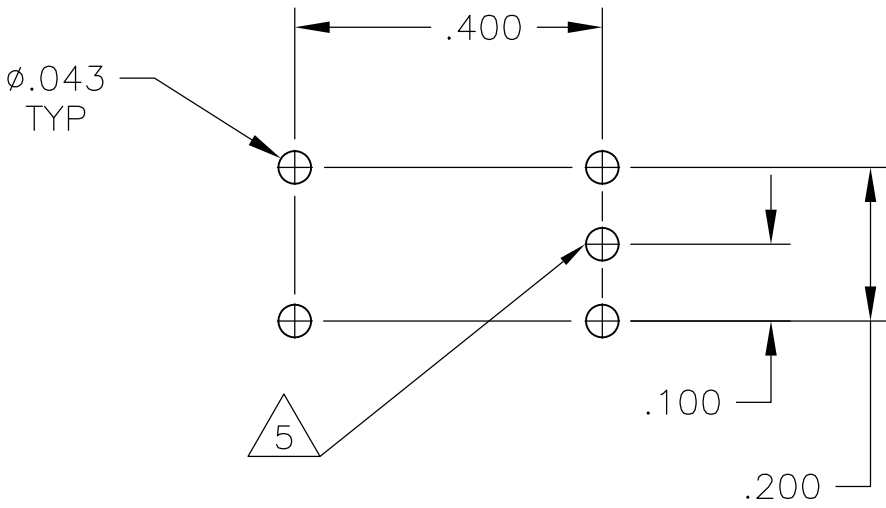
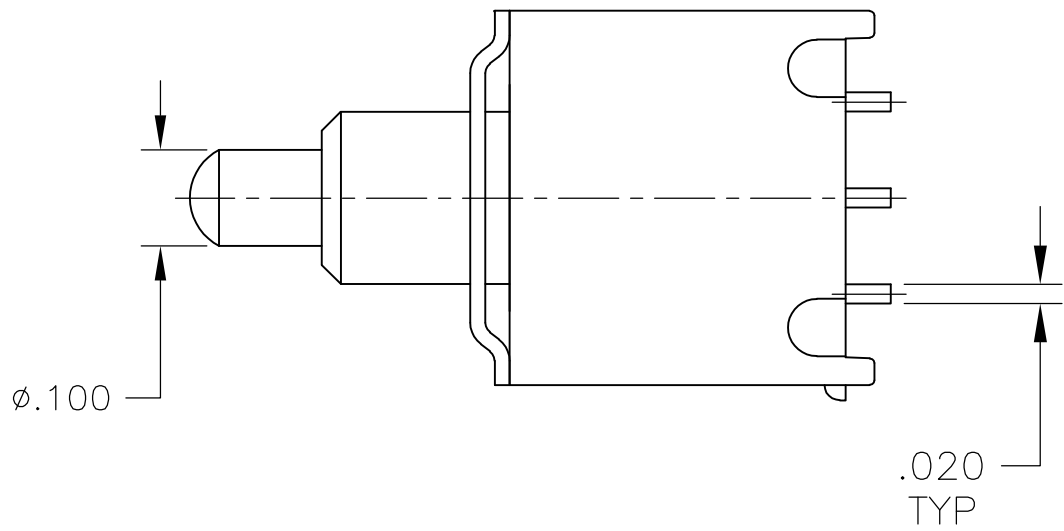
PCB HOLE LAYOUT



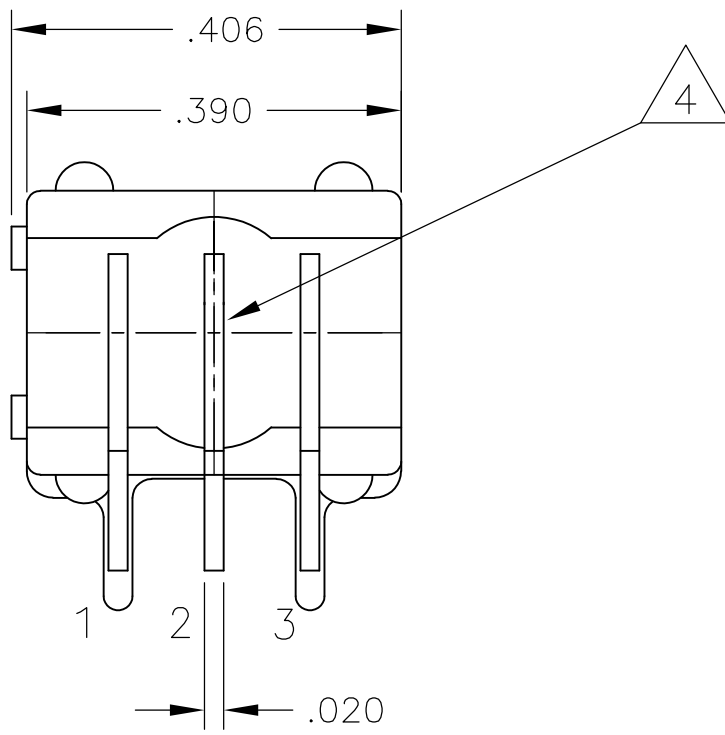
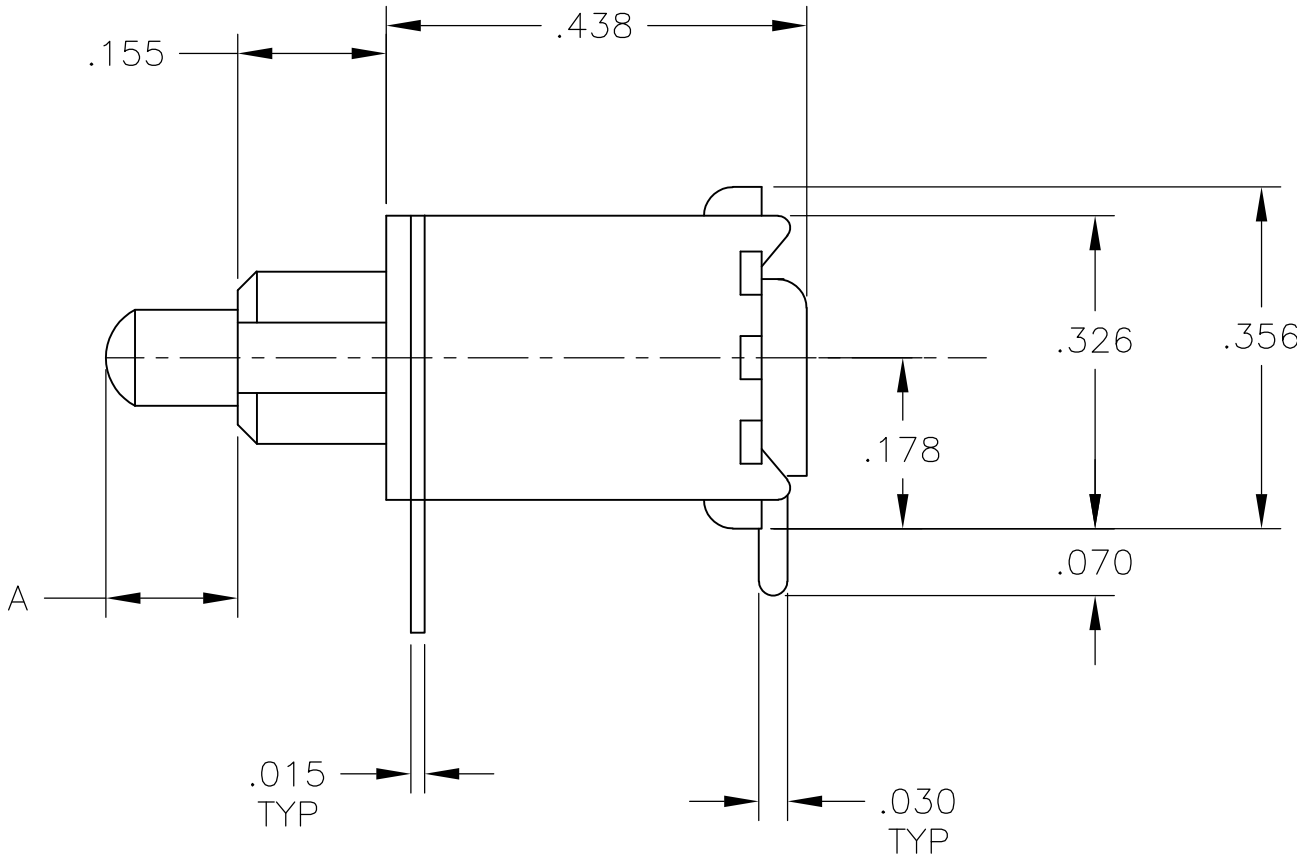
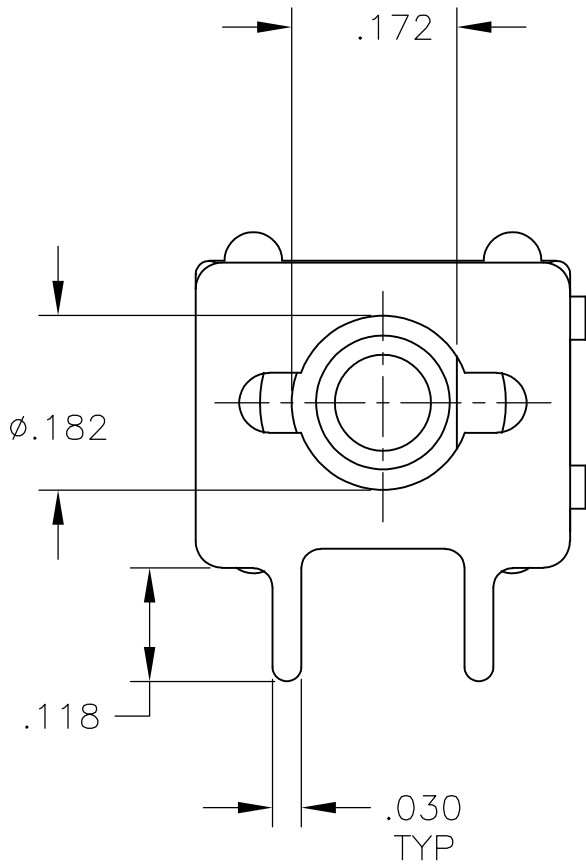
TPB11CGPCES & TPB11FGPCES
TPBF11CGPCES & TPBF11FGPCES

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN M. BINNER	20JUL05	TE Connectivity	
		CHK M. ZITTO	21JUL05		
DIMENSIONS: INCHES	TOLERANCES UNLESS OTHERWISE SPECIFIED:	AP'D M. ZITTO	21JUL05	NAME PUSHBUTTON SWITCH, TPB SERIES	
		PRODUCT SPEC		—	
	0. PLC ± .010 1. PLC ± .010 2. PLC ± .010 3. PLC ± .010 4. PLC ± .010 ANGLES ± .010	APPLICATION SPEC		—	
		—		—	
MATERIAL —	FINISH —	WEIGHT —	—	SIZE A1 00779 1825097	
CUSTOMER DRAWING			SCALE 4:1	SHEET 5	OF 6
				REV A2	

LOC	DIST	REVISIONS				
AD	—	REV	LTR	DESCRIPTION	DATE	OWN
		—	—	SEE SHEET 1	—	—



PCB HOLE LAYOUT



TPB11CGRAES & TPB11FGRAES
TPBF11CGRAES & TPBF11FGRAES

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN M. BINNER	20JUL05	TE Connectivity	
		CHK M. ZITTO	21JUL05		
DIMENSIONS: INCHES		APPROD M. ZITTO	21JUL05	NAME PUSHBUTTON SWITCH, TPB SERIES	
		PRODUCT SPEC		—	
		APPLICATION SPEC		—	
MATERIAL —		WEIGHT —		SIZE A1	
				CAGE CODE 00779	
				DRAWING NO 1825097	
				RESTRICTED TO —	
				CUSTOMER DRAWING	
				SCALE 4:1	
				SHEET 6 OF 6	
				REV A2	