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LOCAD

DIST00

REV

DESCRIPTION

DATE

DWN

APVD

A1

REVISED PER ECO-11-004587

11MAR11

RK

HMR

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
									ALCO	ALCO	ALCO	ALCO	
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

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ± .010

1 PLC ± .010

2 PLC ± .010

3 PLC ± .010

4 PLC ± .010

ANGLES ± .010

MATERIAL

FINISH

DWN M. BINNER 20JUL05

CHK M. ZITTO 21JUL05

APVD M. ZITTO 21JUL05

PRODUCT SPEC

APPLICATION SPEC

WEIGHT

CUSTOMER DRAWING

NAME

PUSHBUTTON SWITCH, TPB SERIES

SIZE A1

CAGE CODE 00779

DRAWING NO 1825097

RESTRICTED TO

SCALE 4:1

SHEET 1 OF 6

REV A1

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).

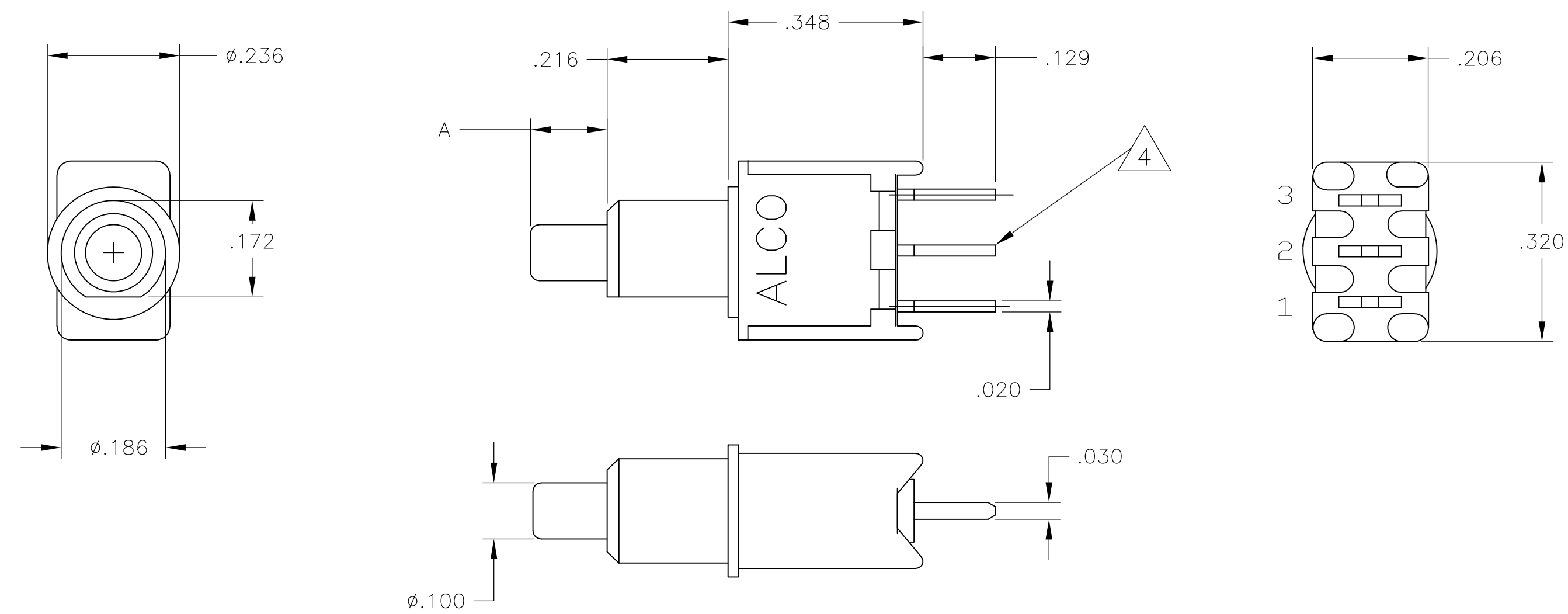
3. DISPOSABLE BOOT SUPPLIED WITH ES VERSIONS. BOOT TO BE PLACED OVER BUSHING BEFORE SOLDER WASHING

4. CENTER TERMINAL PRESENT ON DOUBLE THROW SWITCHES ONLY.

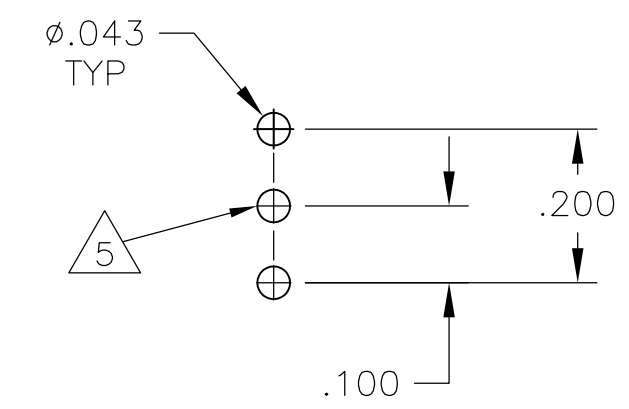
5. CENTER HOLE REQUIRED ON DOUBLE THROW SWITCHES ONLY.

4805 (3/11)

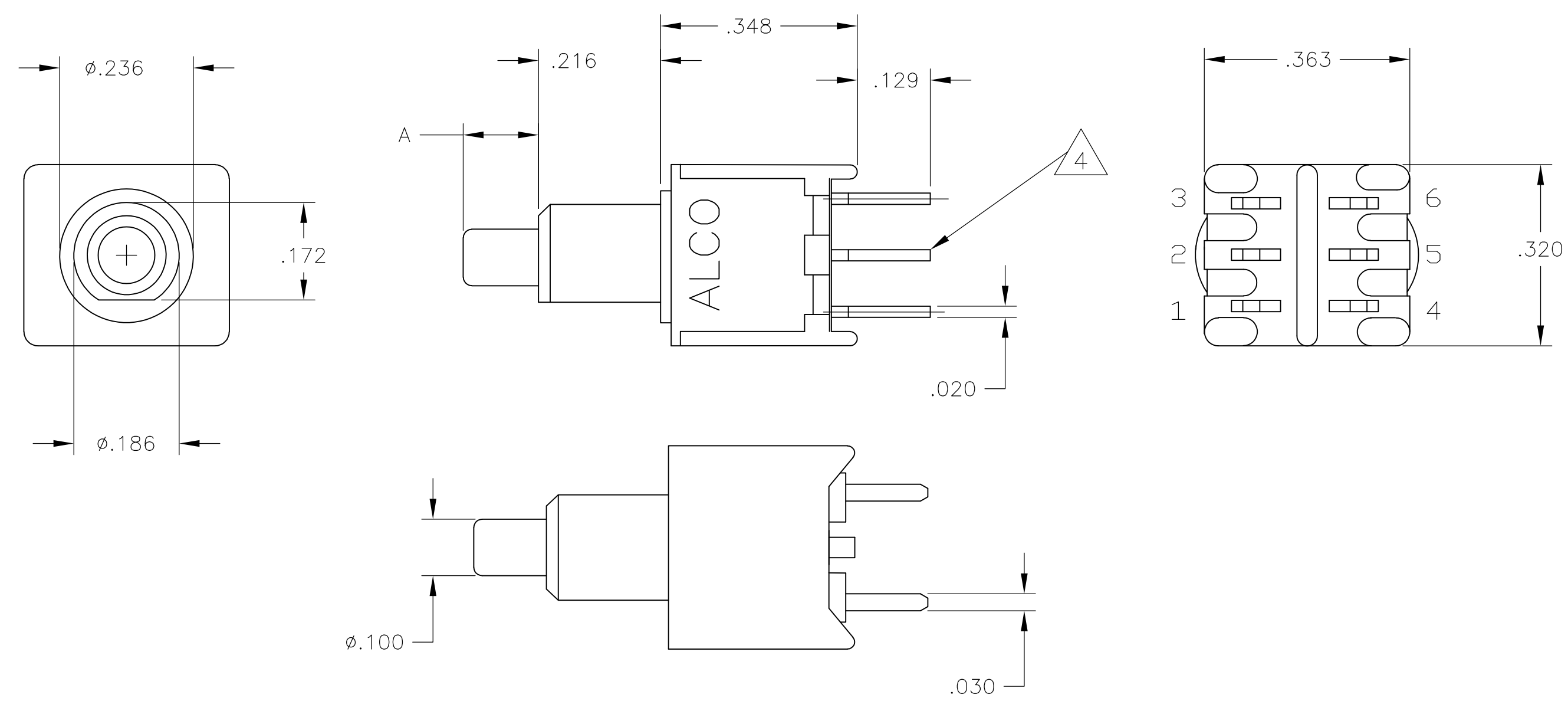
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AD	—	P	LTR	DESCRIPTION	DATE	DWN	APVD
			—	SEE SHEET 1	—	—	—



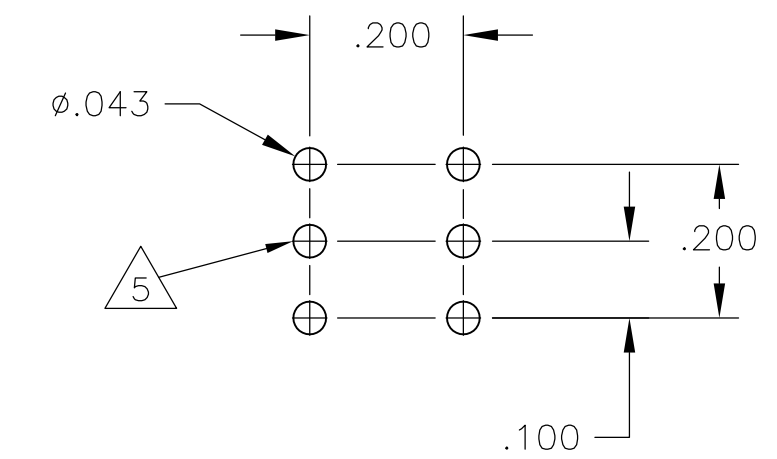
TPB11CGPC & TPB11F6PC



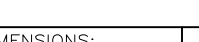
PCB HOLE LAYOUT



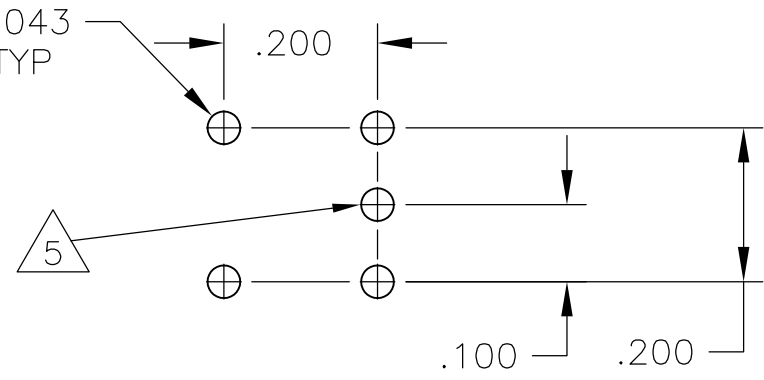
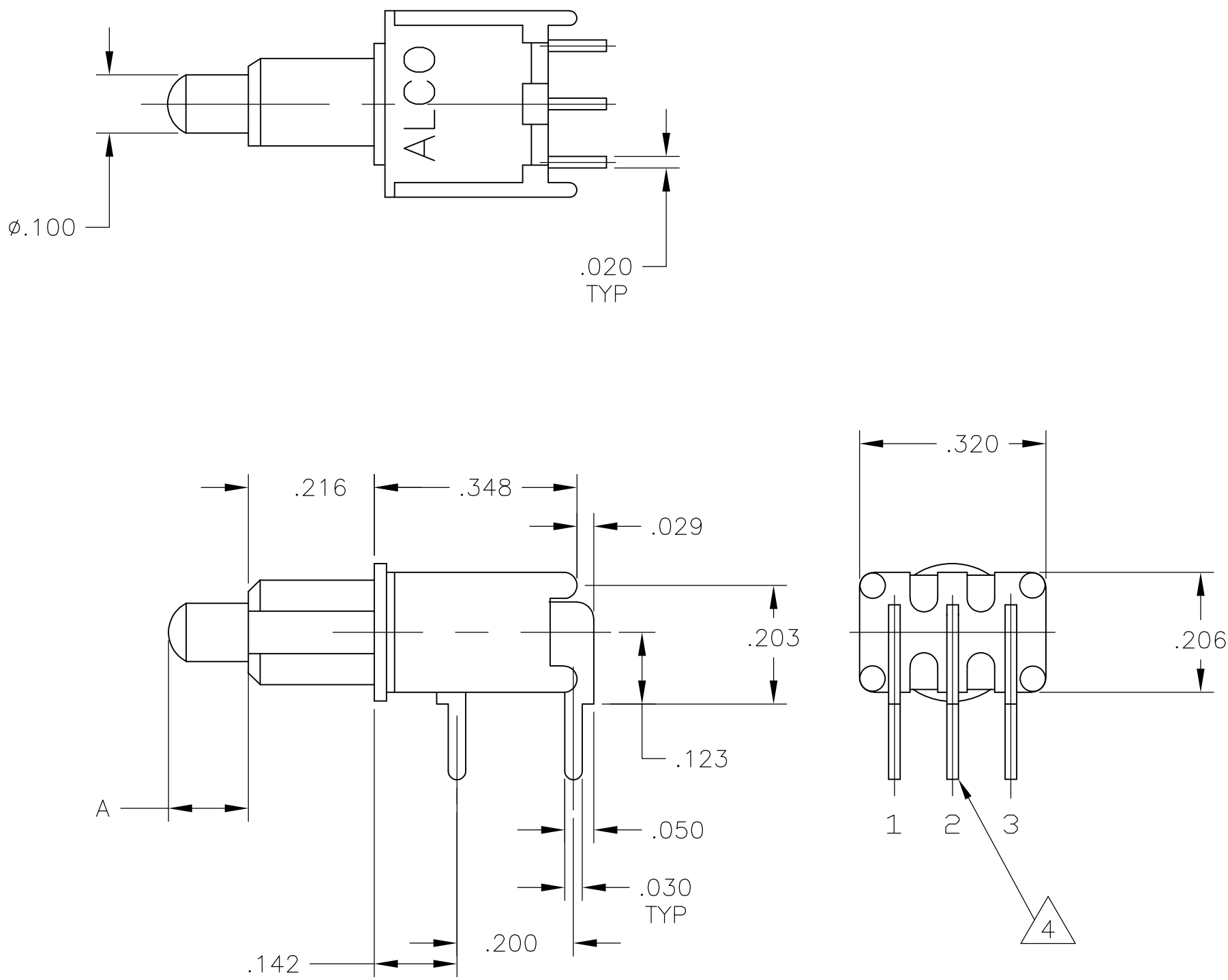
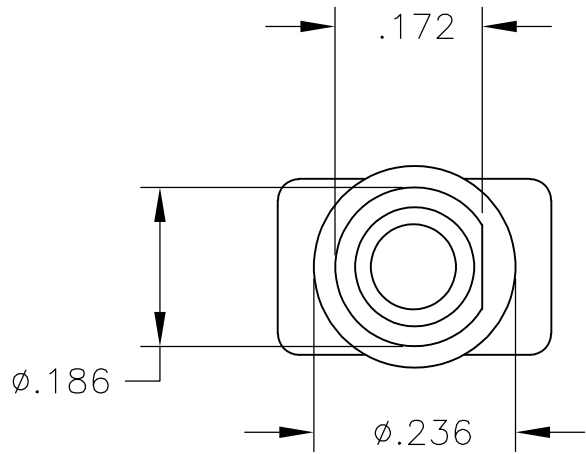
TPB21MGPC & TPB21RGPC



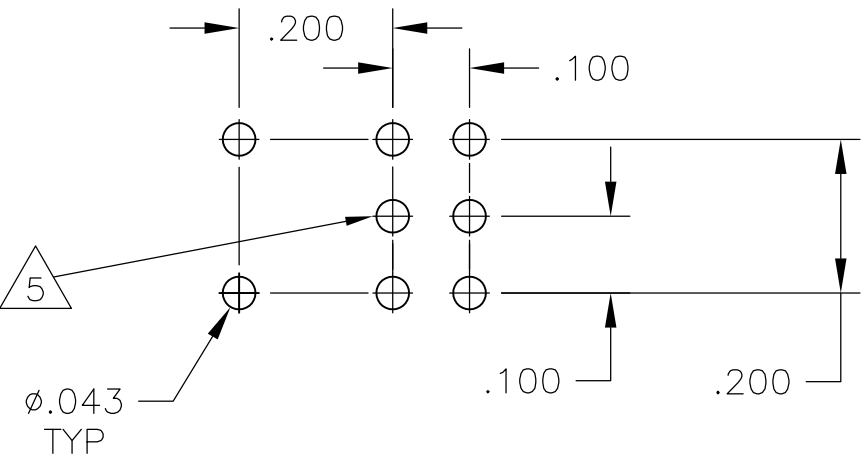
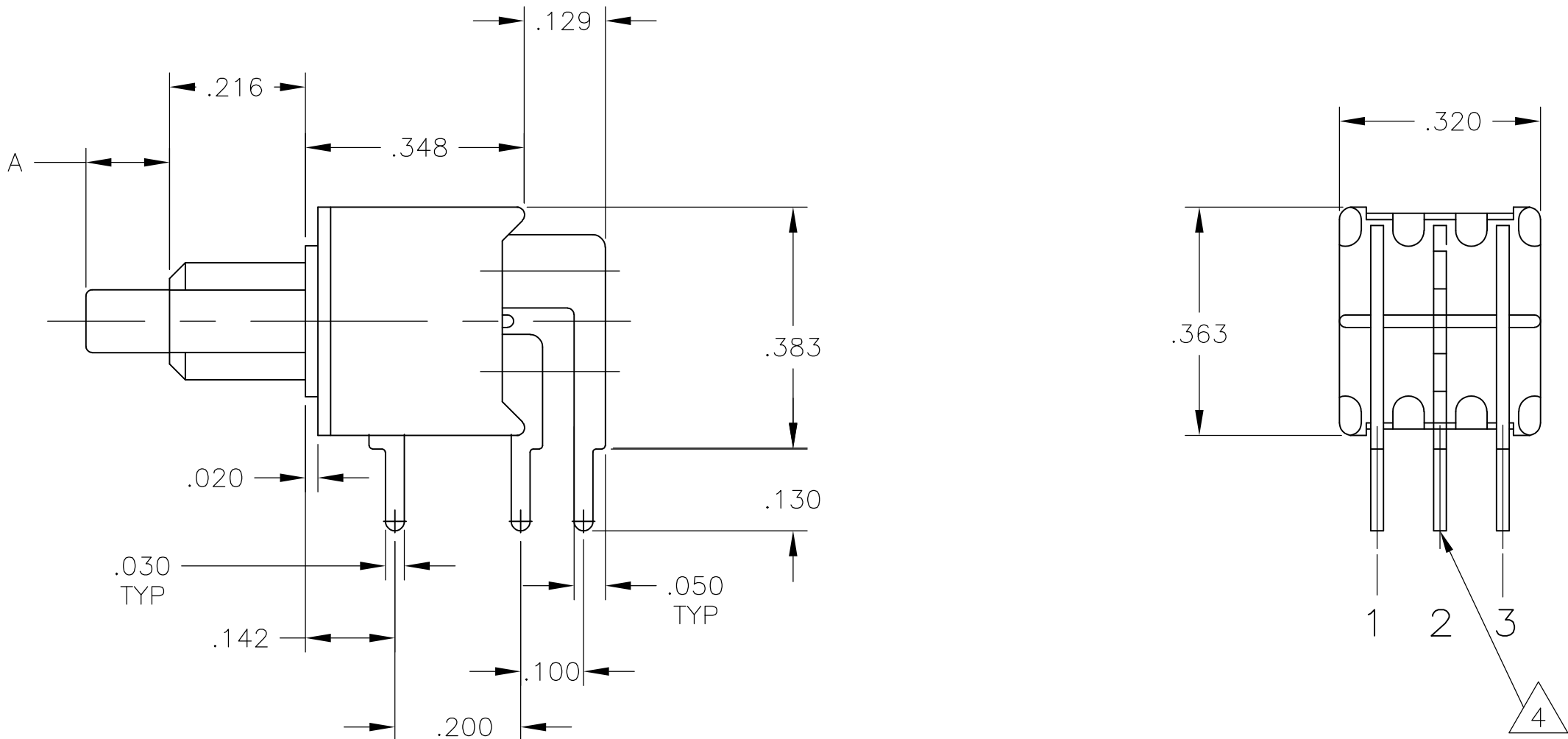
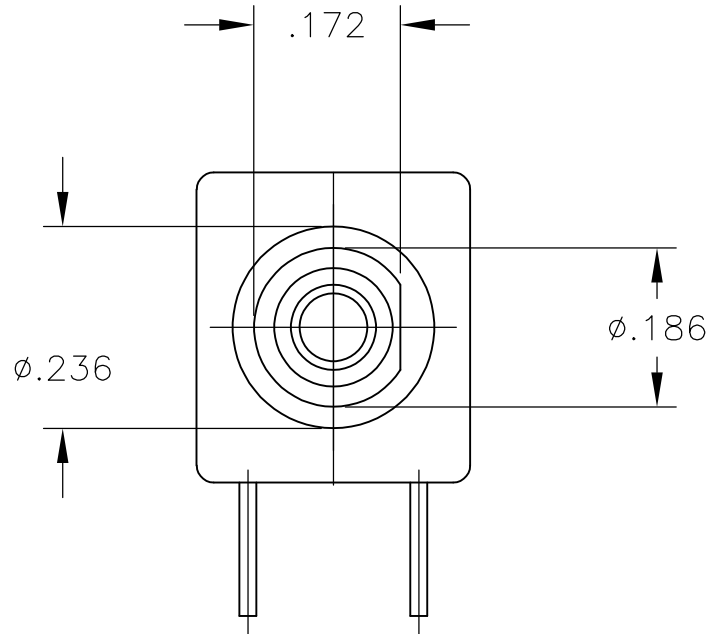
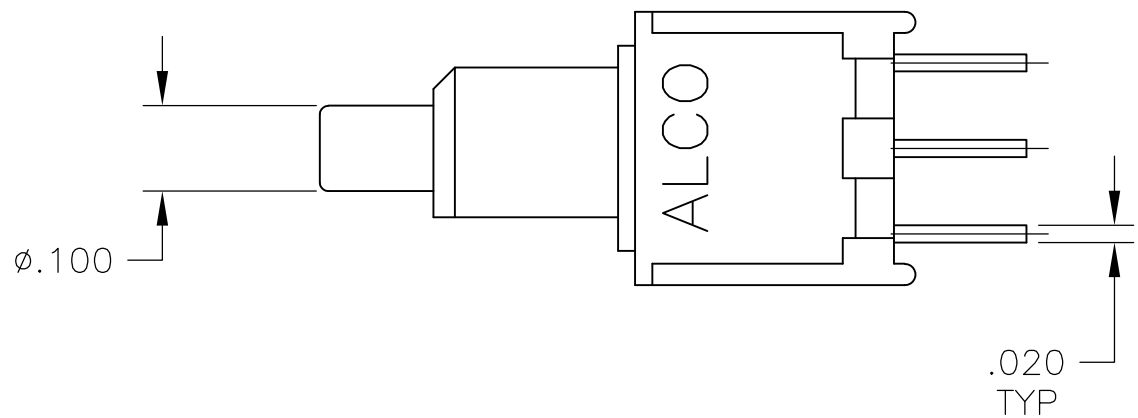
PCB HOLE LAYOUT

THIS DRAWING IS A CONTROLLED DOCUMENT.		DIN M.BINNER 20JUL05 CHK M.ZITTO 21JUL05		 TE Connectivity		
DIMENSIONS:		APD M.ZITTO 21JUL05				
INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED:		PUSHBUTTON SWITCH, TPB SERIES		
		1.0 PLC ± -		PRODUCT SPEC		
		1.1 PLC ± -		-		
		2.0 PLC ± -		APPLICATION SPEC		
		3.0 PLC ± -		-		
4.0 PLC ± -		TOLERANCES UNLESS OTHERWISE SPECIFIED:		SIZE		
ANGLES		± -		GAGE CODE		
MATERIAL		FINISH		DRAWING NO		
-		-		A1 00779 C-1825097		
		WEIGHT		RESTRICTED TO		
		-		-		
		CUSTOMER DRAWING		SCALE 4:1 SHEET 2 of 6 REV A1		

LOC		DIST		REVISIONS			
P	F	L	TR	DESCRIPTION	DATE	DWN	APVD
AD	—	—	—	SEE SHEET 1	—	—	—



TPB11CGRA & TPB11FGRA
TPBF11CGRA & TPBF11FGRA

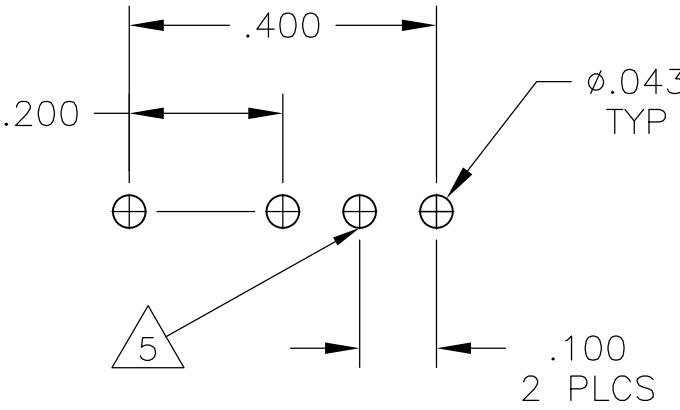
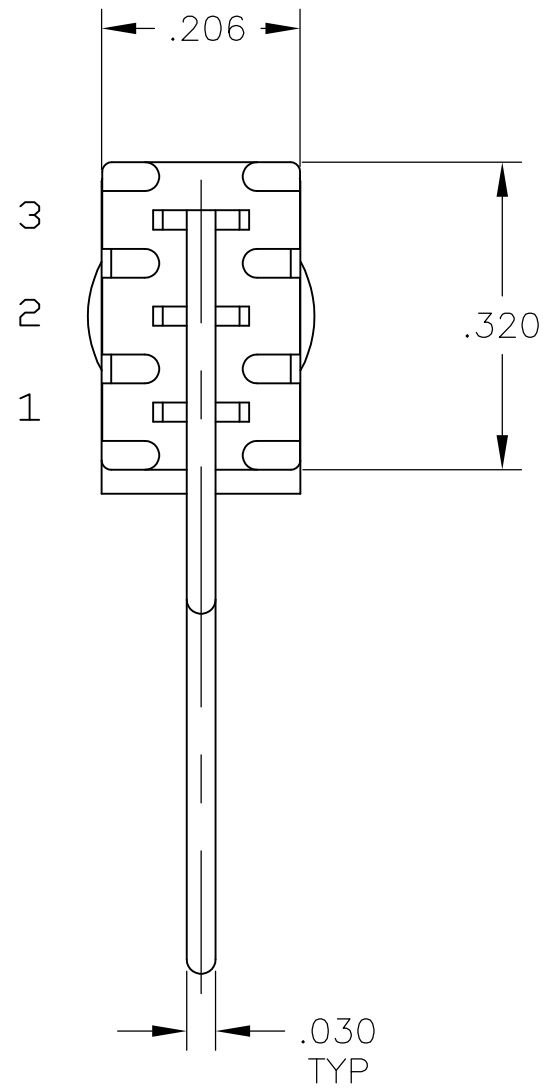
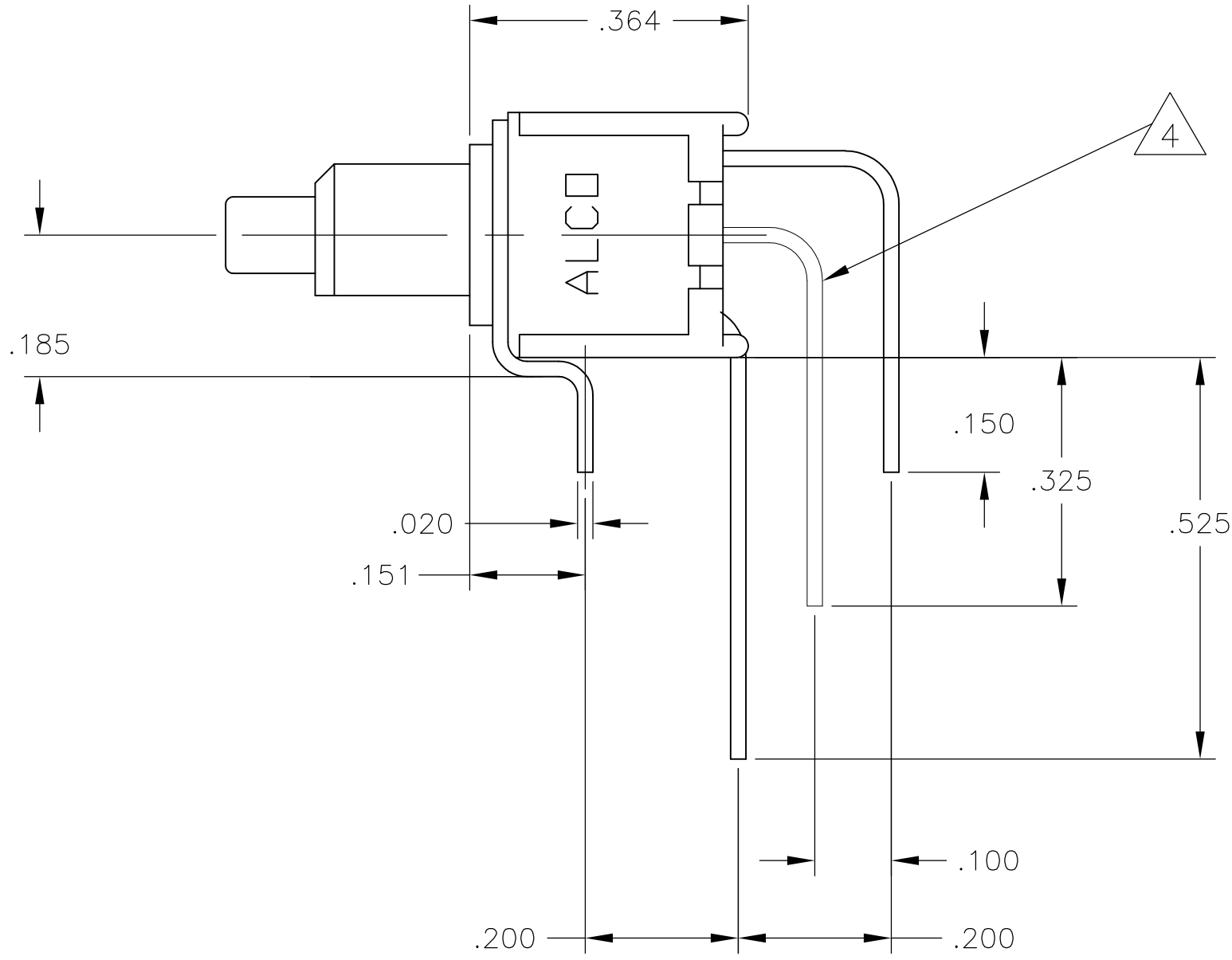
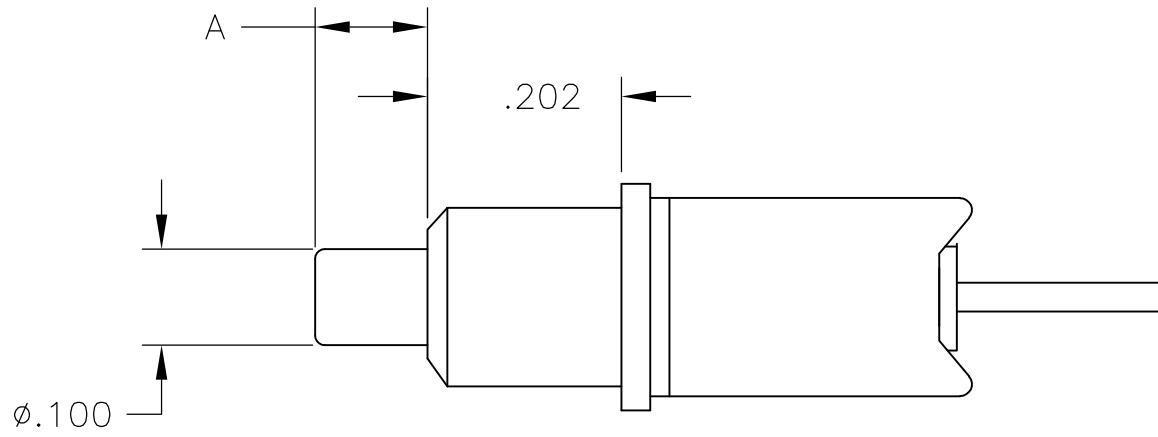
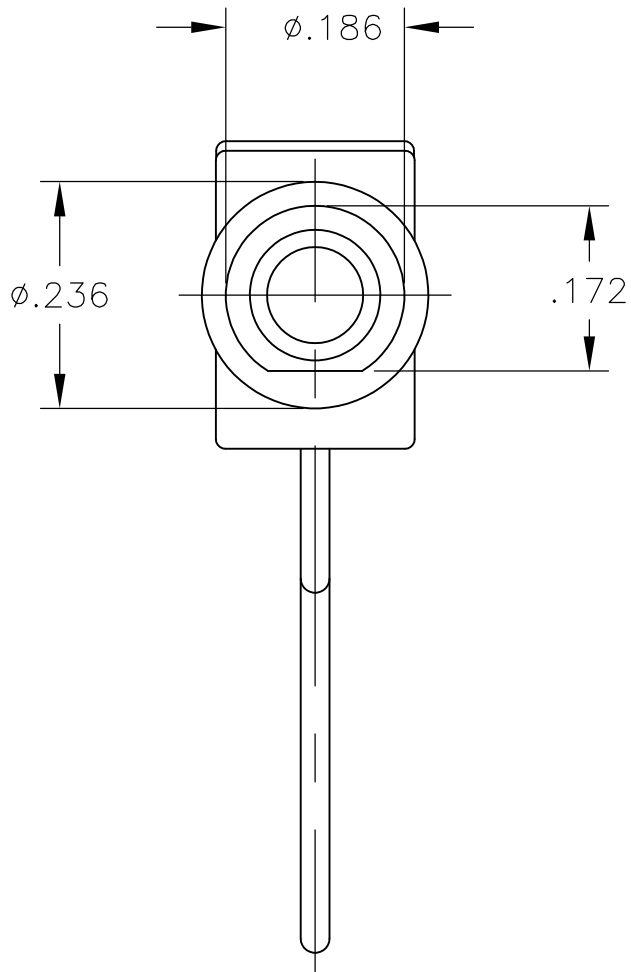


PCB HOLE LAYOUT

TPB21MGRA & TPB21RGRA

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TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD M. ZITTO 21JUL05	NAME PUSHBUTTON SWITCH, TPB SERIES	
0. PLC ± .010		PRODUCT SPEC	—	
1. PLC ± .010		APPLICATION SPEC	—	
2. PLC ± .010		—	—	
3. PLC ± .010		—	—	
4. PLC ± .010		—	—	
ANGLES ± .010		—	—	
FINISH —		—	—	
MATERIAL —		—	—	
CUSTOMER DRAWING		SCALE 4:1	SHEET 3 OF 6	
REV A1		SIZE A1	CAGE CODE 00779	
DRAWING NO. 1825097		RESTRICTED TO		—

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

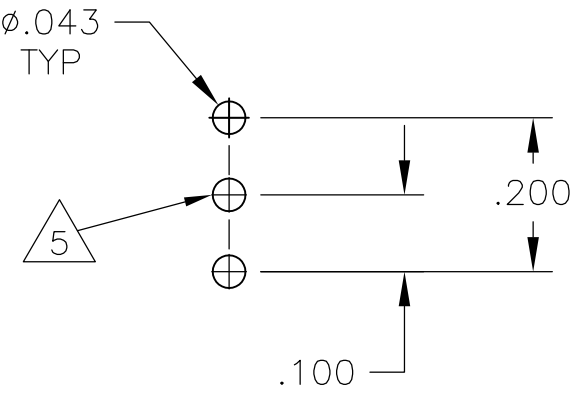


PCB HOLE LAYOUT

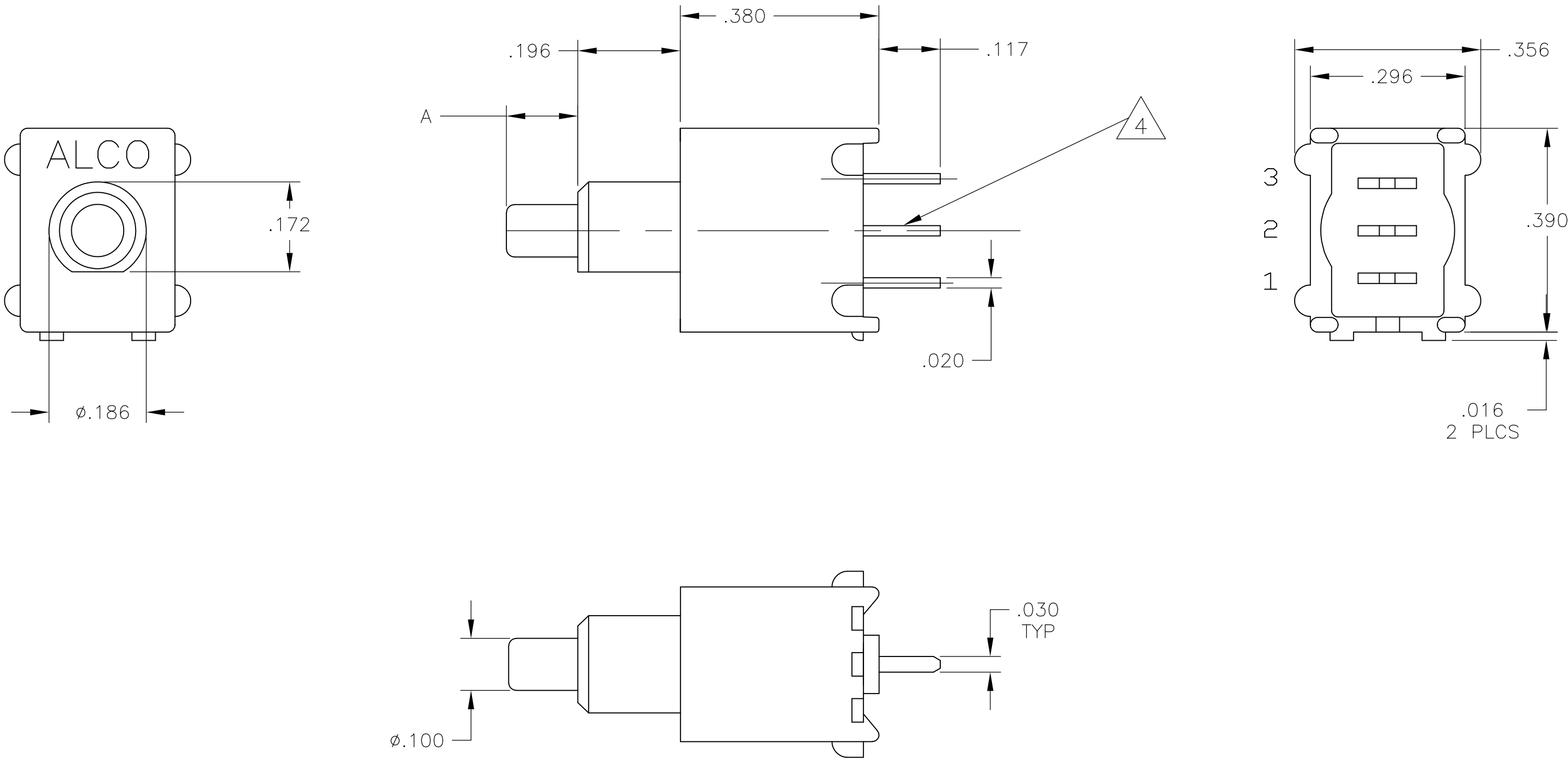
TPB11CVRA & TPB11FGVRA

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN M. BINNER	20JUL05	TE Connectivity	
		CHK M. ZITTO	21JUL05		
DIMENSIONS: INCHES	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD 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	—	RESTRICTED TO	
—	—	A1 00779 1825097		—	
CUSTOMER DRAWING			SCALE 4:1	SHEET 4 OF 6	REV A1

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



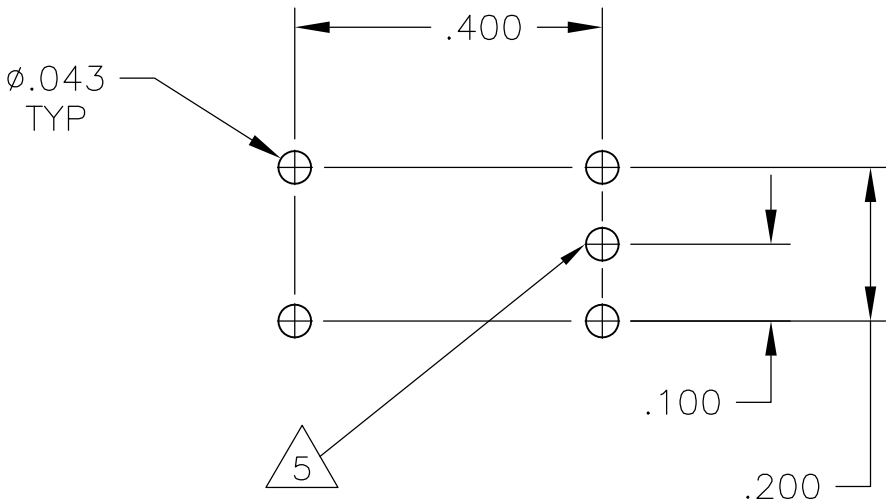
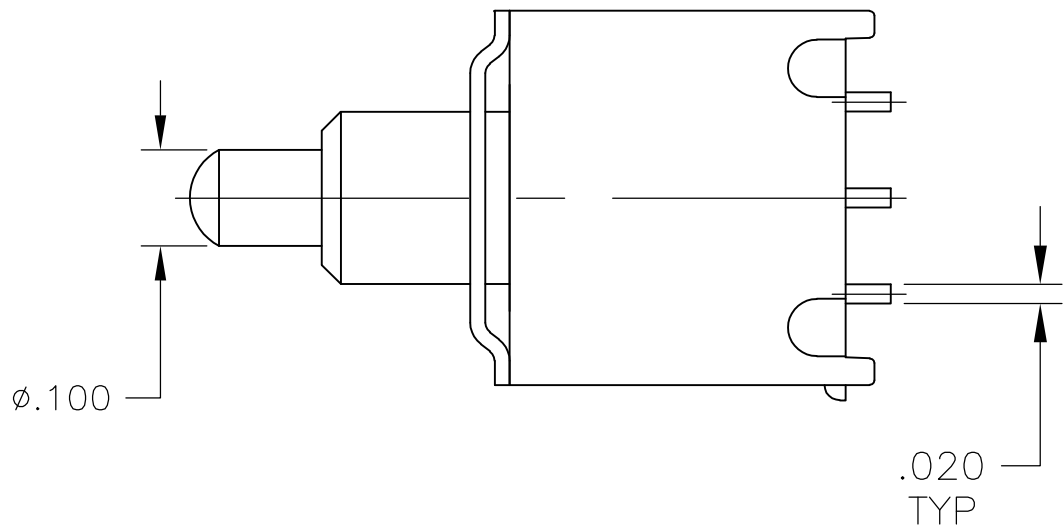
PCB HOLE LAYOUT



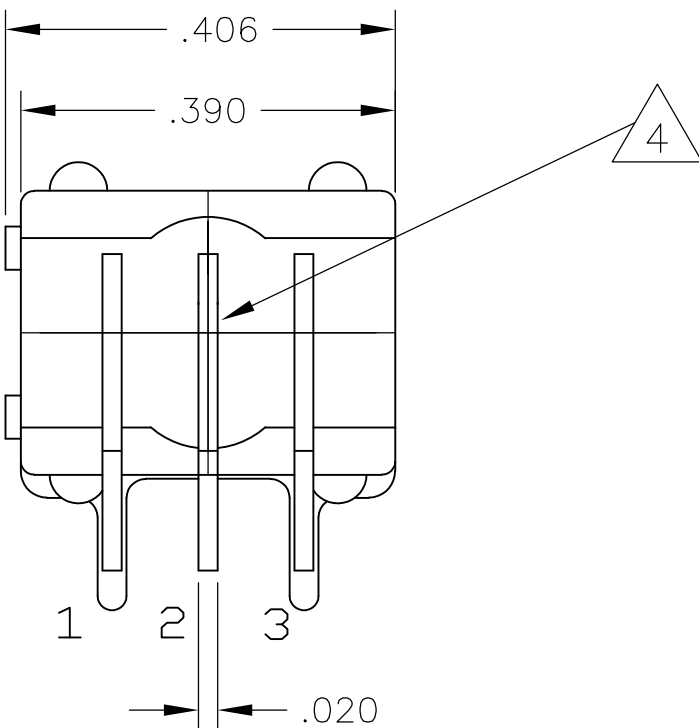
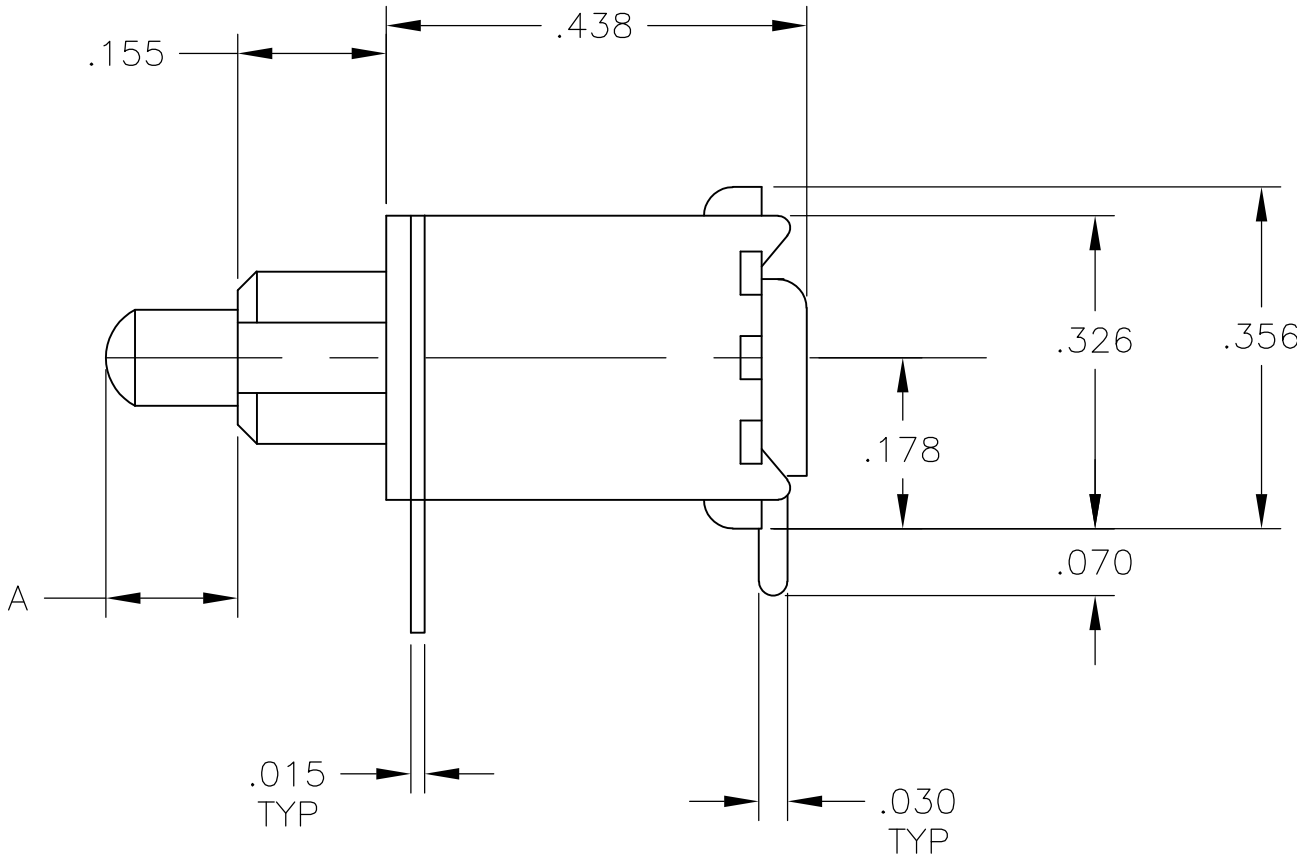
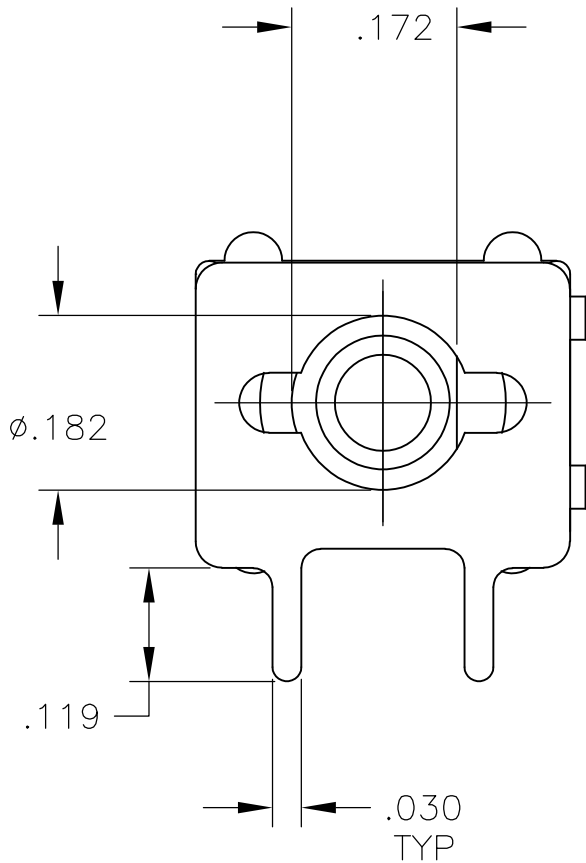
TPB11CGPCES & TPB11FGPCES
TPBF11CGPCES & TPBF11FGPCES

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 ± — 1. PLC ± — 2. PLC ± — 3. PLC ± .010 4. PLC ± — ANGLES ± ± —	APPLICATION SPEC		—	
		—		—	
MATERIAL —	FINISH —	WEIGHT —	A1 00779 1825097		RESTRICTED TO —
CUSTOMER DRAWING			SCALE 4:1	SHEET 5	OF 6
			REV A1		

LOC	DIST	REVISIONS				
AD	—	REV	LTR	DESCRIPTION	DATE	DWN
		—		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	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APPROD 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 —	RESTRICTED TO —
CUSTOMER DRAWING		SCALE 4:1	SHEET 6 OF 6 REV A1