

Component name	Base material	Finish
Case	LCP, black, UL94 V-0	
Terminal, wire lug (gold)	Brass	Gold over nickel
Terminal, PC & RA (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	
Guide, CC & FF switches only	Nylon 6/6, white	

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 level
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	Poles	Rating	Function	Plating	Terminations	Button color	04
TPA							04
	1	1 = Gold .4VA	C = SPST momentary	G = Gold	Blank = Wire lug	0 = Black	
	2 (1+1)	3 = Silver 1 Amp	F = SPDT momentary	Blank = Silver	PC = printed circuit	2 = Red	
			M = DPST momentary		RA = right angle	6 = Blue	
			R = DPDT momentary				

Notes:  
1. Silver only available in wire lug and pc terminations

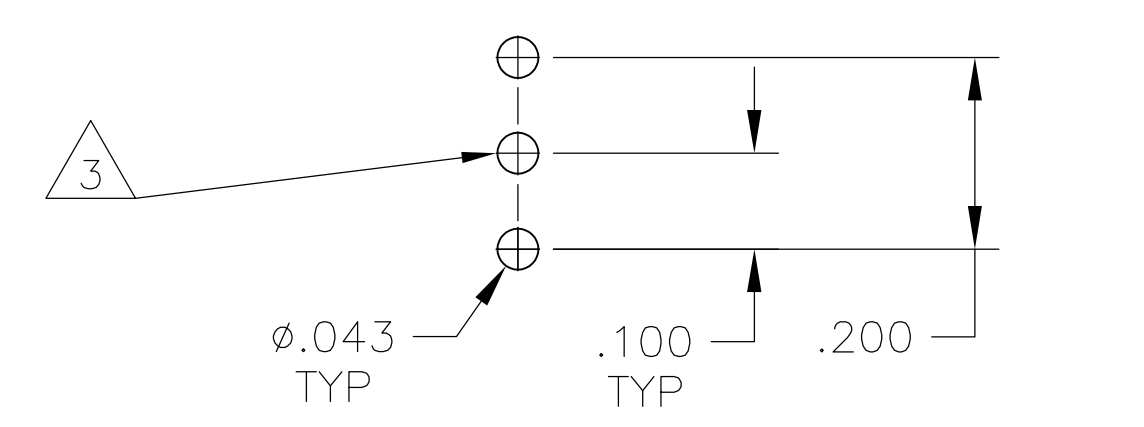
TE P/N	Alco P/N	Poles	Throws	Plating	Terminals	Button Color	Function		Connected Terminals	
1825096-1	TPA11CGPC004	1	1	Gold	PC	Black	Off	Mom	Off	1-3
<del>4</del> 1825096-2	TPA11CGPC204	1	1	Gold	PC	Red	Off	Mom	Off	1-3
<del>4</del> 1825096-3	TPA11CGPC604	1	1	Gold	PC	Blue	Off	Mom	Off	1-3
1825096-4	TPA11CGRA004	1	1	Gold	Right Angle	Black	Off	Mom	Off	1-3
1825096-5	TPA11CGRA204	1	1	Gold	Right Angle	Red	Off	Mom	Off	1-3
<del>4</del> 1825096-6	TPA11CGRA604	1	1	Gold	Right Angle	Blue	Off	Mom	Off	1-3
1825096-7	TPA11FGPC004	1	2	Gold	PC	Black	On	Mom	1-2	2-3
<del>4</del> 1825096-8	TPA11FGPC204	1	2	Gold	PC	Red	On	Mom	1-2	2-3
<del>4</del> 1825096-9	TPA11FGPC604	1	2	Gold	PC	Blue	On	Mom	1-2	2-3
1-1825096-0	TPA11FGRA004	1	2	Gold	Right Angle	Black	On	Mom	1-2	2-3
<del>4</del> 1-1825096-1	TPA11FGRA204	1	2	Gold	Right Angle	Red	On	Mom	1-2	2-3
<del>4</del> 1-1825096-2	TPA11FGRA604	1	2	Gold	Right Angle	Blue	On	Mom	1-2	2-3
<del>4</del> 1-1825096-3	TPA21CCGPC004	2 (1+1)	1	Gold	PC	Black	Off	Mom	Off	1-3, 4-6
1-1825096-4	TPA21CCGRA004	2 (1+1)	1	Gold	Right Angle	Black	Off	Mom	Off	1-3, 4-6
<del>4</del> 1-1825096-5	TPA21FFGRA204	2 (1+1)	2	Gold	Right Angle	Red	On	Mom	1-2, 4-5	2-3, 5-6
<del>4</del> 1-1825096-6	TPA21MGRA004	2	1	Gold	Right Angle	Black	Off	Mom	Off	1-3, 4-6

- 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 CENTER TERMINAL PRESENT ON DOUBLE THROW SWITCHES ONLY.
  - 4 OBSOLETE.

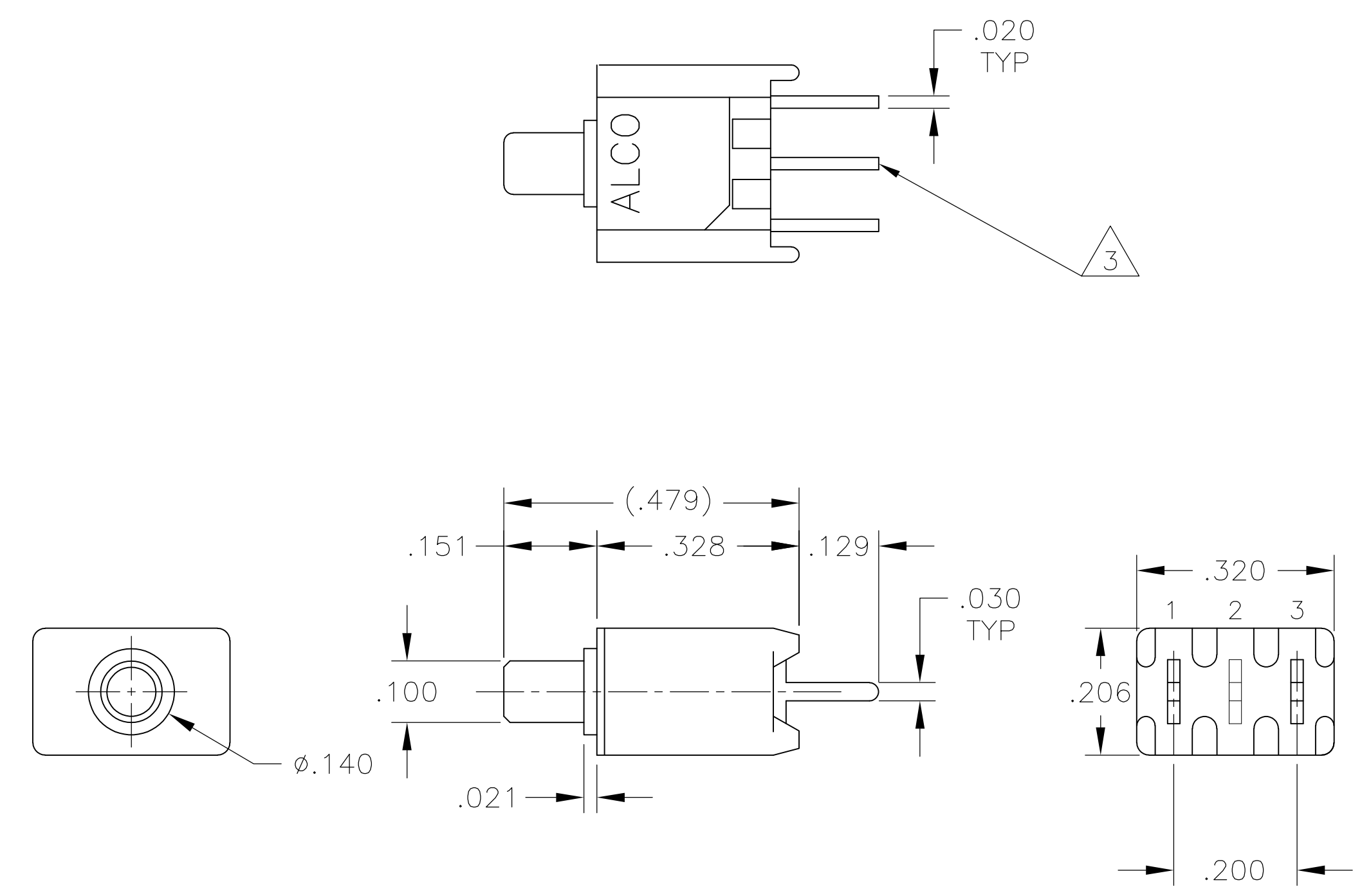
THIS DRAWING IS A CONTROLLED DOCUMENT. DIMENSIONS: INCHES. TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± .010, 1 PLC ± .010, 2 PLC ± .010, 3 PLC ± .010, 4 PLC ± .010, ANGLES ± .010. MATERIAL: -. FINISH: -. WEIGHT: -. SIZE: A1. CASE CODE: 00779. DRAWING NO: 1825096. RESTRICTED TO: -. CUSTOMER DRAWING. SCALE: 4:1. SHEET: 1 OF 4. REV: A2.

STE TE Connectivity  
PUSHBUTTON SWITCH, TPA SERIES

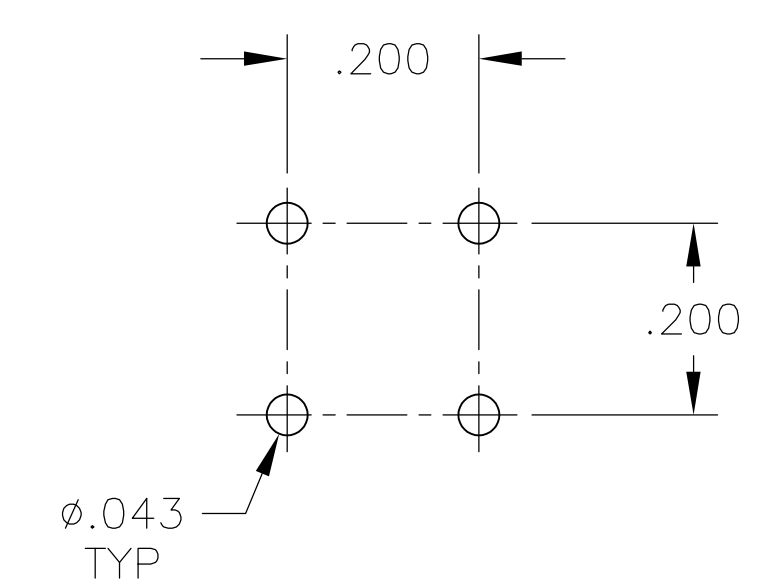
LOC		DIST		REVISIONS			
IF	LTR	DESCRIPTION	DATE	DWN	APVD		
-	-	SEE SHEET 1	-	-	-		



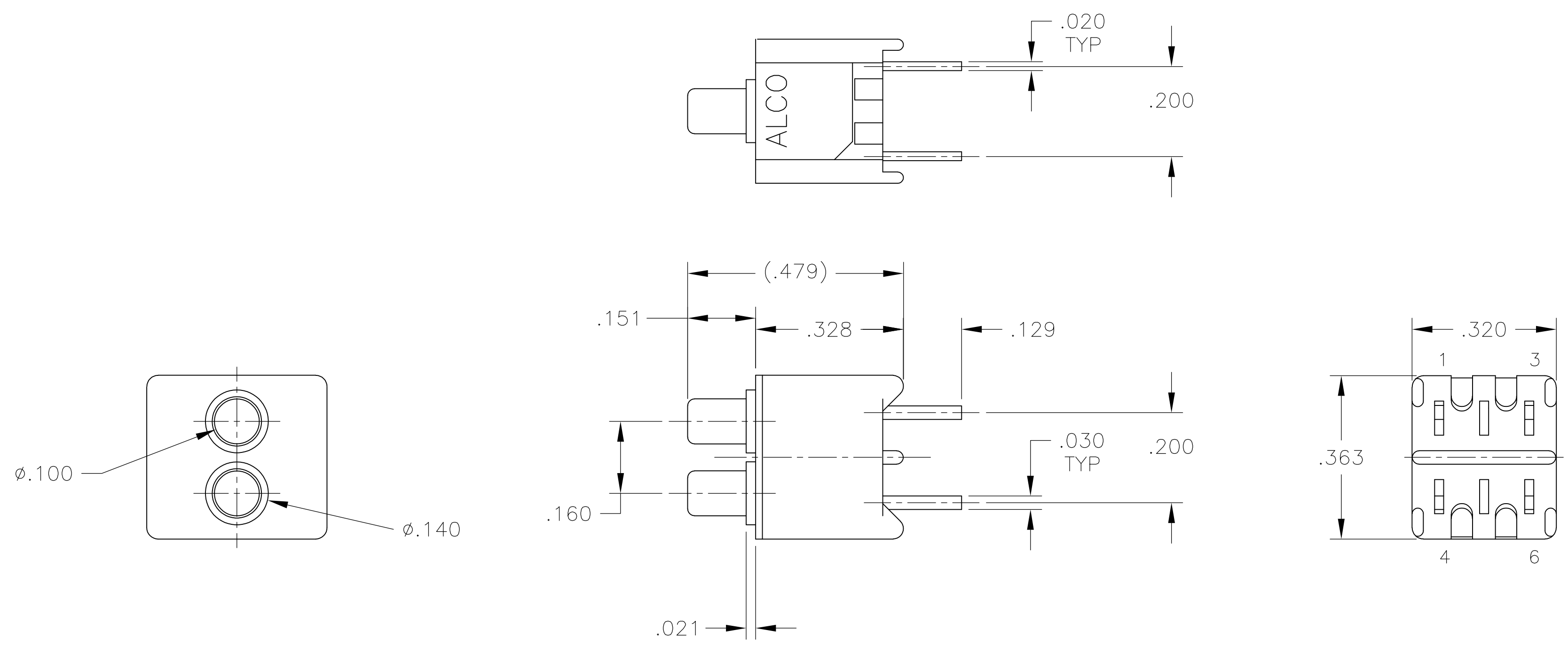
PCB HOLE LAYOUT



TPA11CGPC  
TPA11FGPC



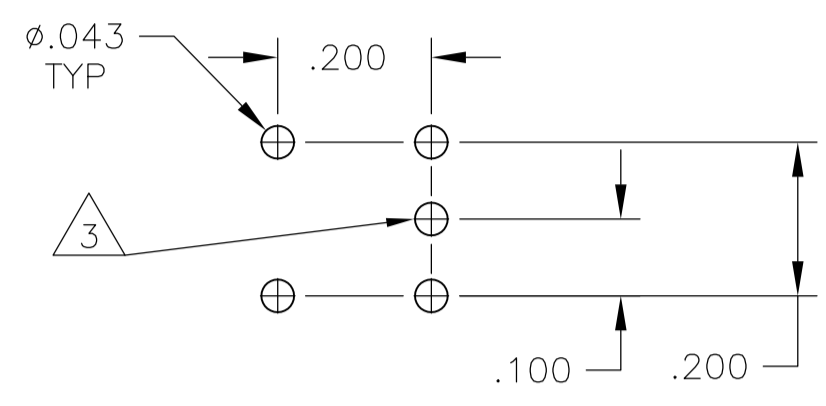
PCB HOLE LAYOUT



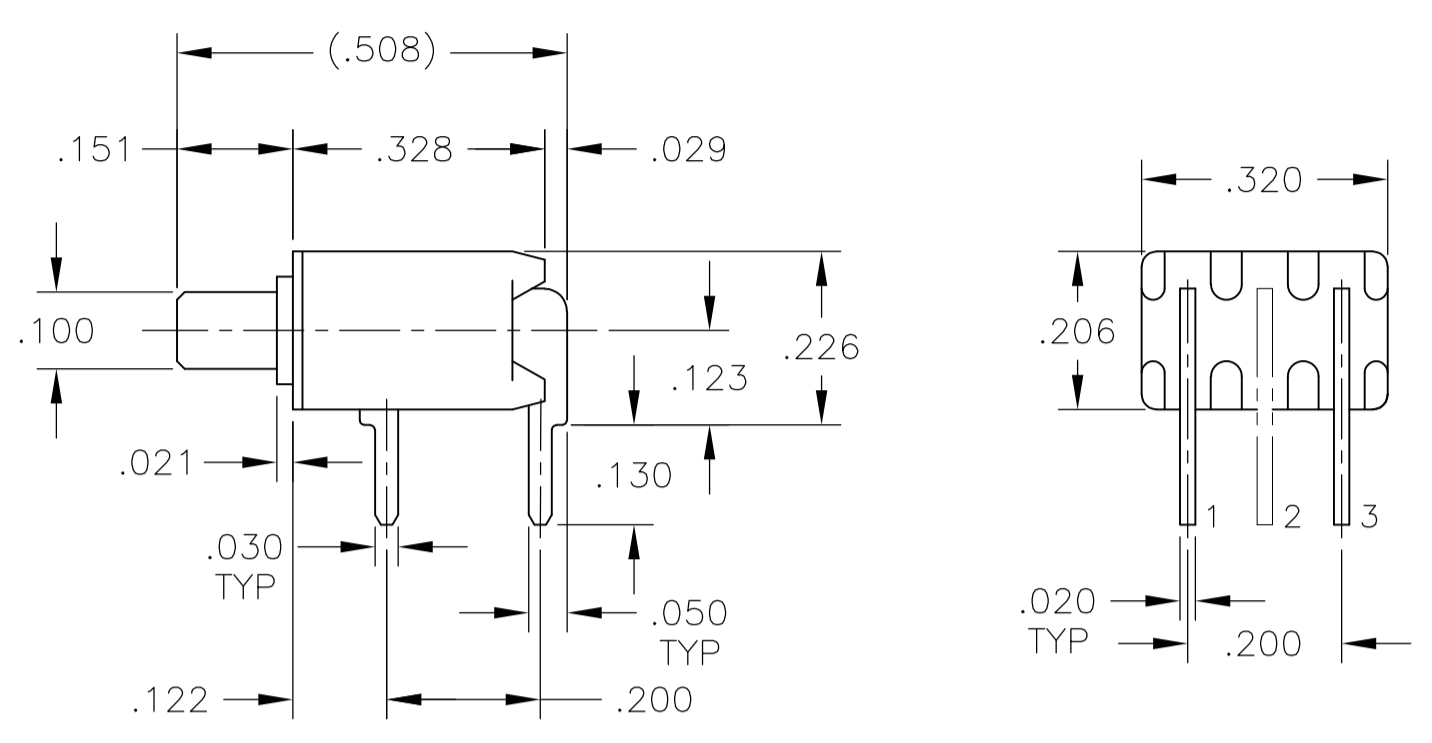
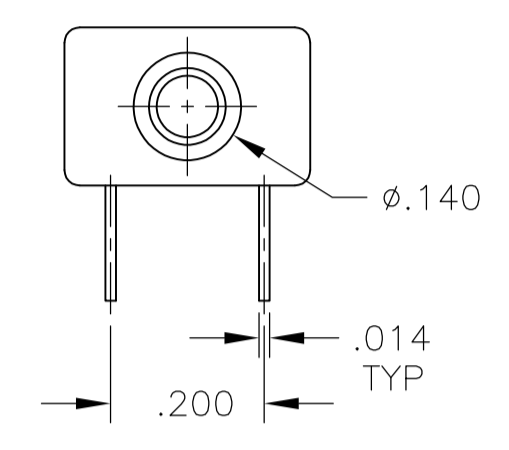
TPA21CCGPC

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN M. BINNER	01SEP05		
DIMENSIONS: INCHES		CHK M. ZITTO	21JUL05		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APP'D M. ZITTO	NAME	PUSHBUTTON SWITCH, TPA SERIES	
0. PLC ± - 1. PLC ± - 2. PLC ± - 3. PLC ± .010 4. PLC ± - ANGLES ± - FINISH -		PRODUCT SPEC	APPLICATION SPEC	SIZE A1	CAGE CODE 00779
MATERIAL		RESTRICTED TO	DRAWING NO. 1825096	SCALE 4:1	SHEET 2 OF 4
CUSTOMER DRAWING		REV	A2		

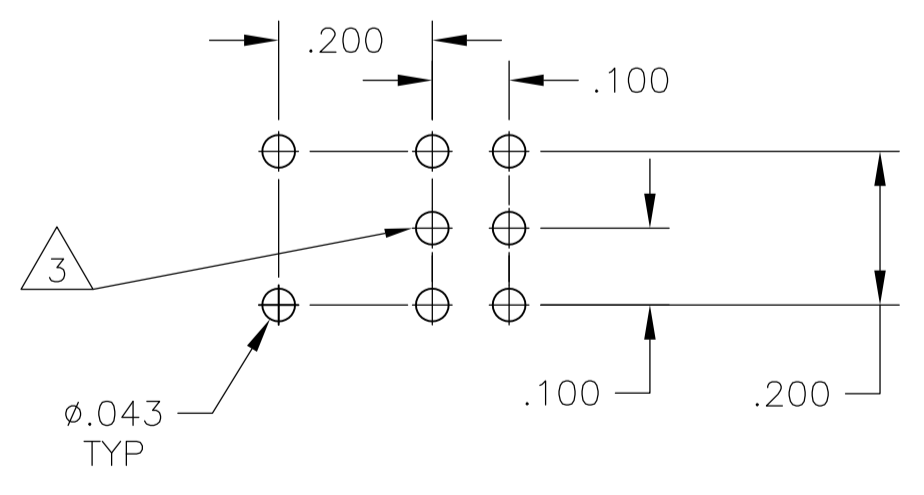
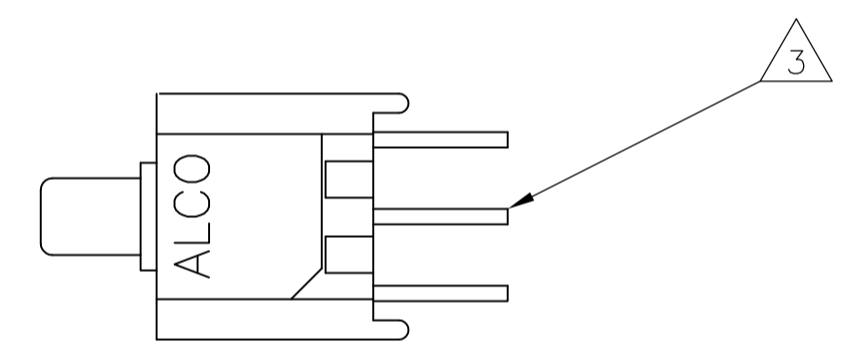
LOC	DIST	REVISIONS			
P	LTR	DESCRIPTION	DATE	DNW	APVD
-	-	SEE SHEET 1	-	-	-



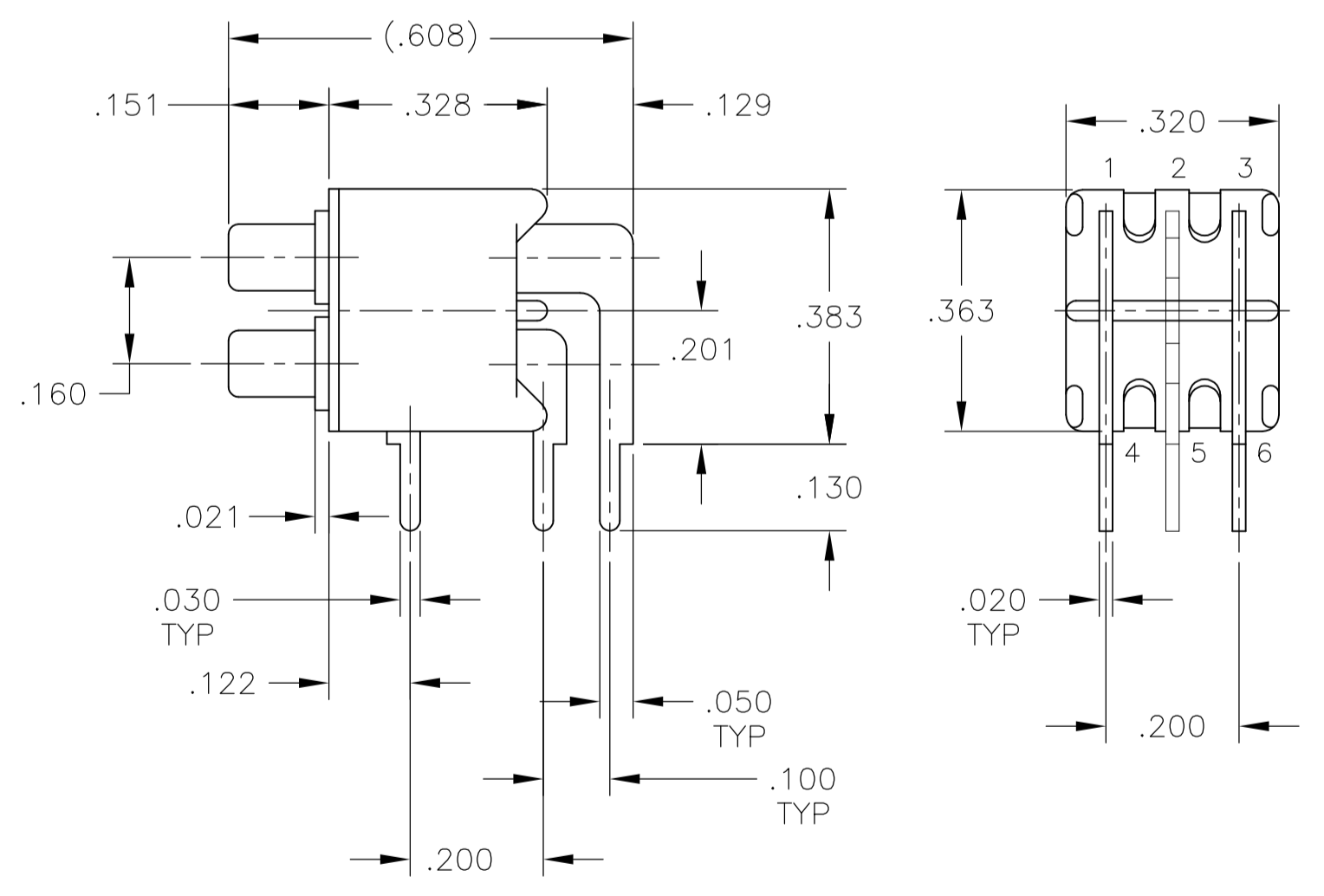
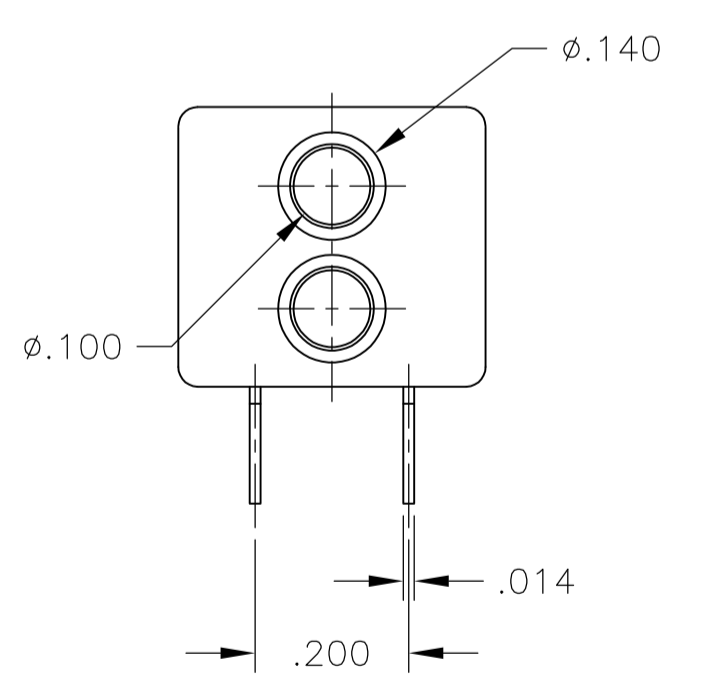
PCB HOLE LAYOUT



TPA11CGRA  
TPA11FGRA

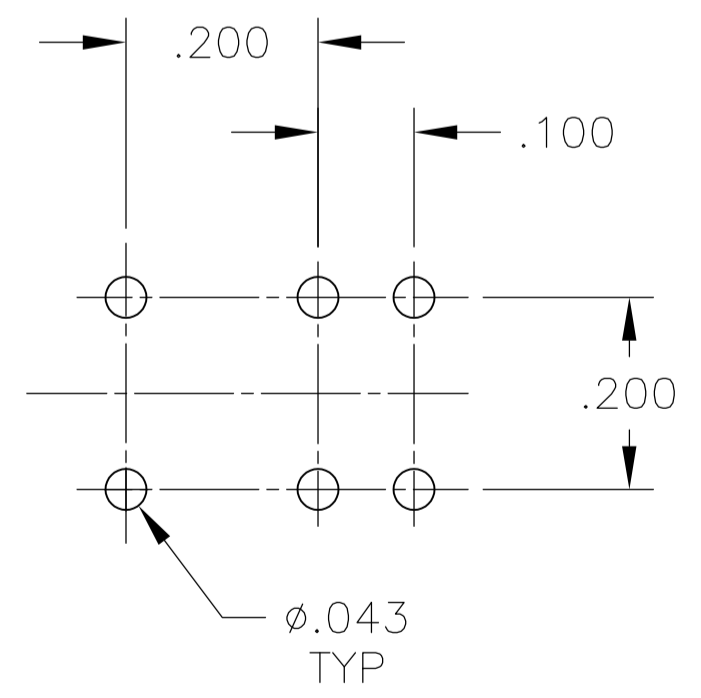
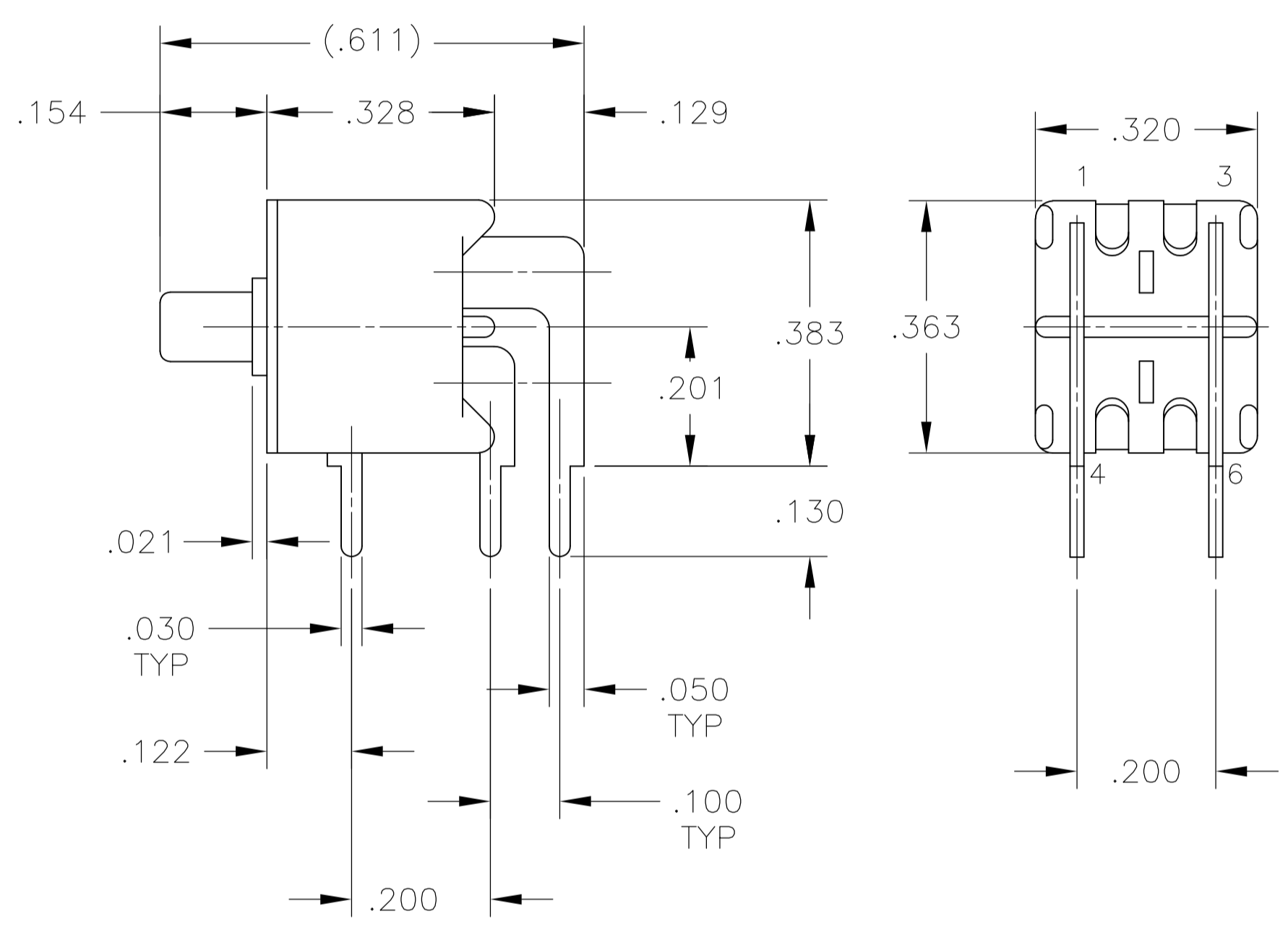
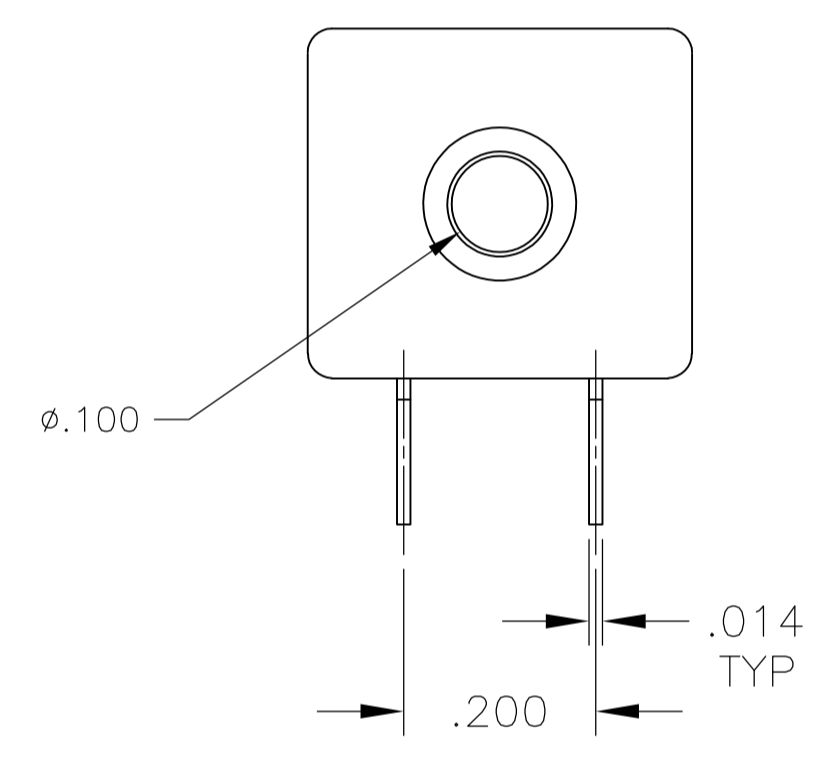
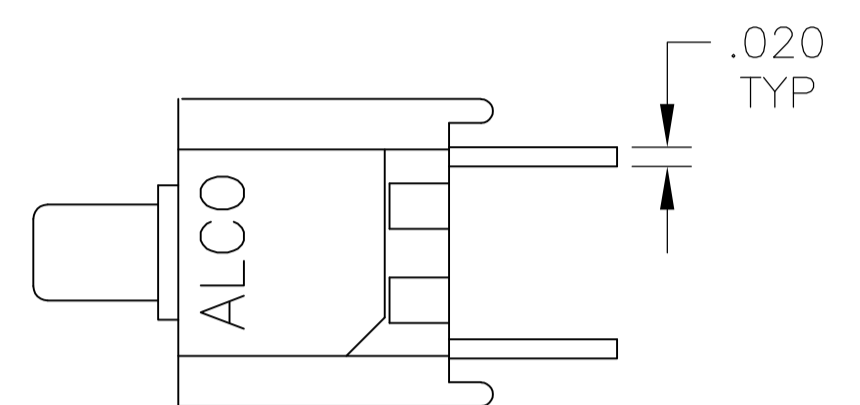


PCB HOLE LAYOUT



TPA21CCGRA  
TPA21FFGRA

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN M. BINNER 21JUL05	01SEP05	TE Connectivity
DIMENSIONS: INCHES		CHK M. ZITTO 21JUL05	NAME	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		PRODUCT SPEC		PUSHBUTTON SWITCH, TPA SERIES
0. PLC ± - 1. PLC ± - 2. PLC ± - 3. PLC ± .010 4. PLC ± - ANGLES ± -		APPLICATION SPEC		
MATERIAL		WEIGHT		RESTRICTED TO
FINISH		A1 00779 C=1825096		SCALE 4:1 SHEET 3 OF 4 REV A2
CUSTOMER DRAWING				



TPA21MGRA

PCB HOLE LAYOUT

THIS DRAWING IS A CONTROLLED DOCUMENT.		DIN	M. BINNER	01SEP05	 TE Connectivity
DIMENSIONS: INCHES		CHK	M. ZITTO	21JUL05	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APP'D	M. ZITTO	21JUL05	NAME
0. PLC	± .010	PRODUCT SPEC	PUSHBUTTON SWITCH, TPA SERIES		
1. PLC	± .010	APPLICATION SPEC	SIZE	A1	CAGE CODE
2. PLC	± .010	WEIGHT	00779	DRAWING NO	1825096
3. PLC	± .010	CUSTOMER DRAWING	SCALE	4:1	SHEET 4 OF 4
4. PLC	± .010	RESTRICTED TO	REV A2		
ANGLES	± .010				