

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	

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

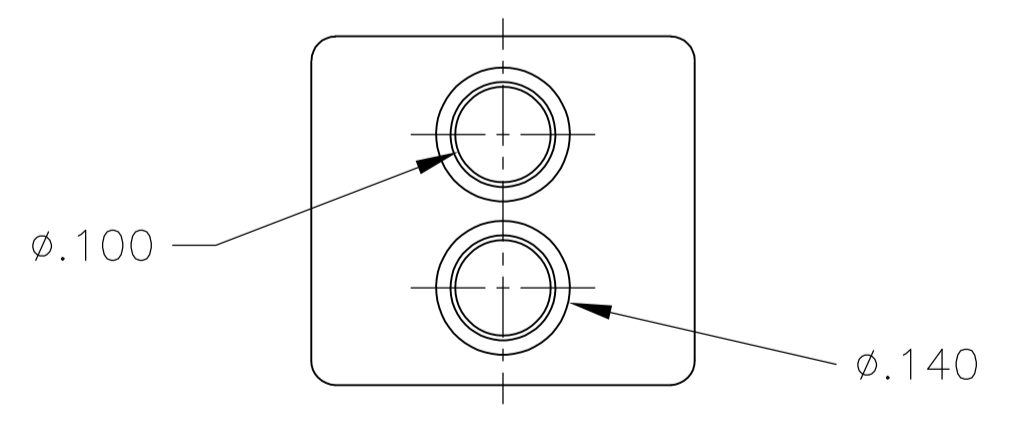
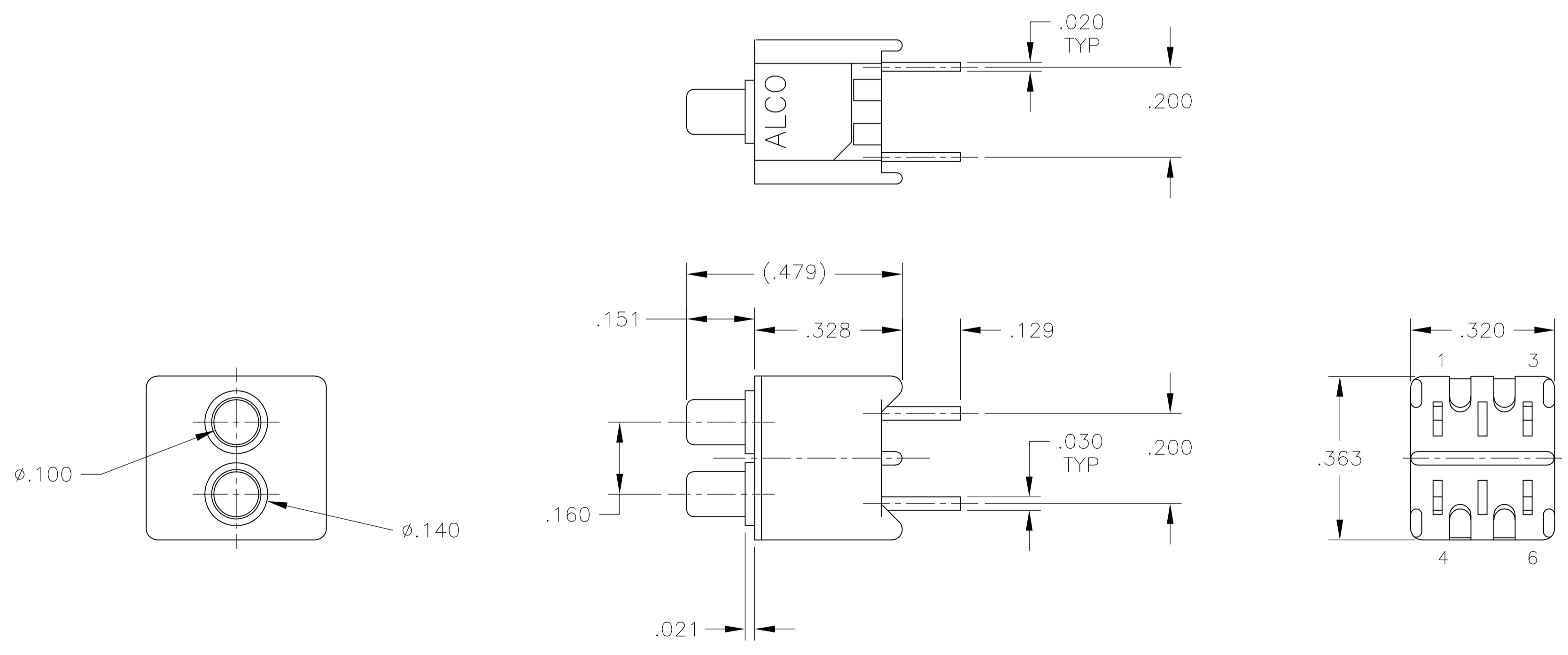
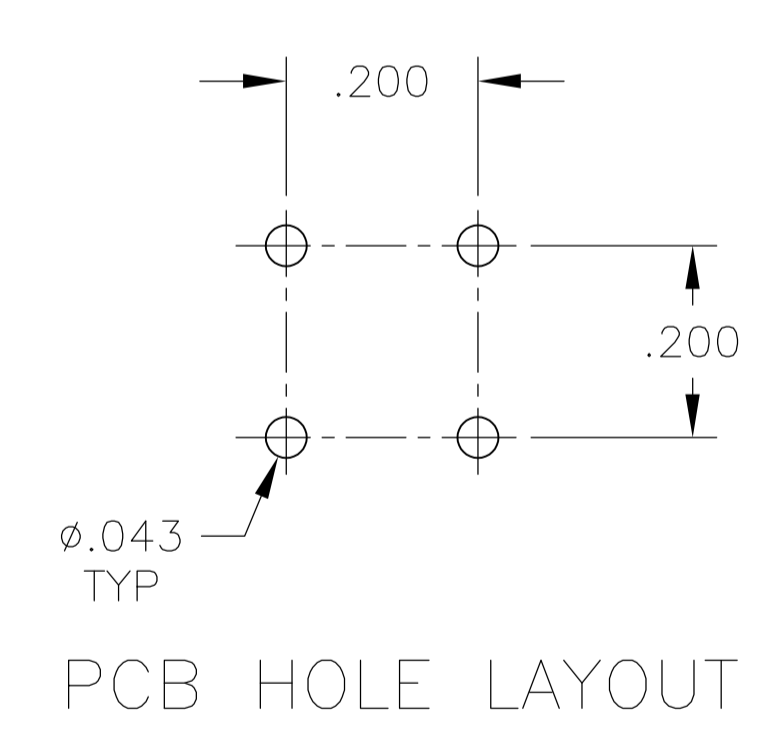
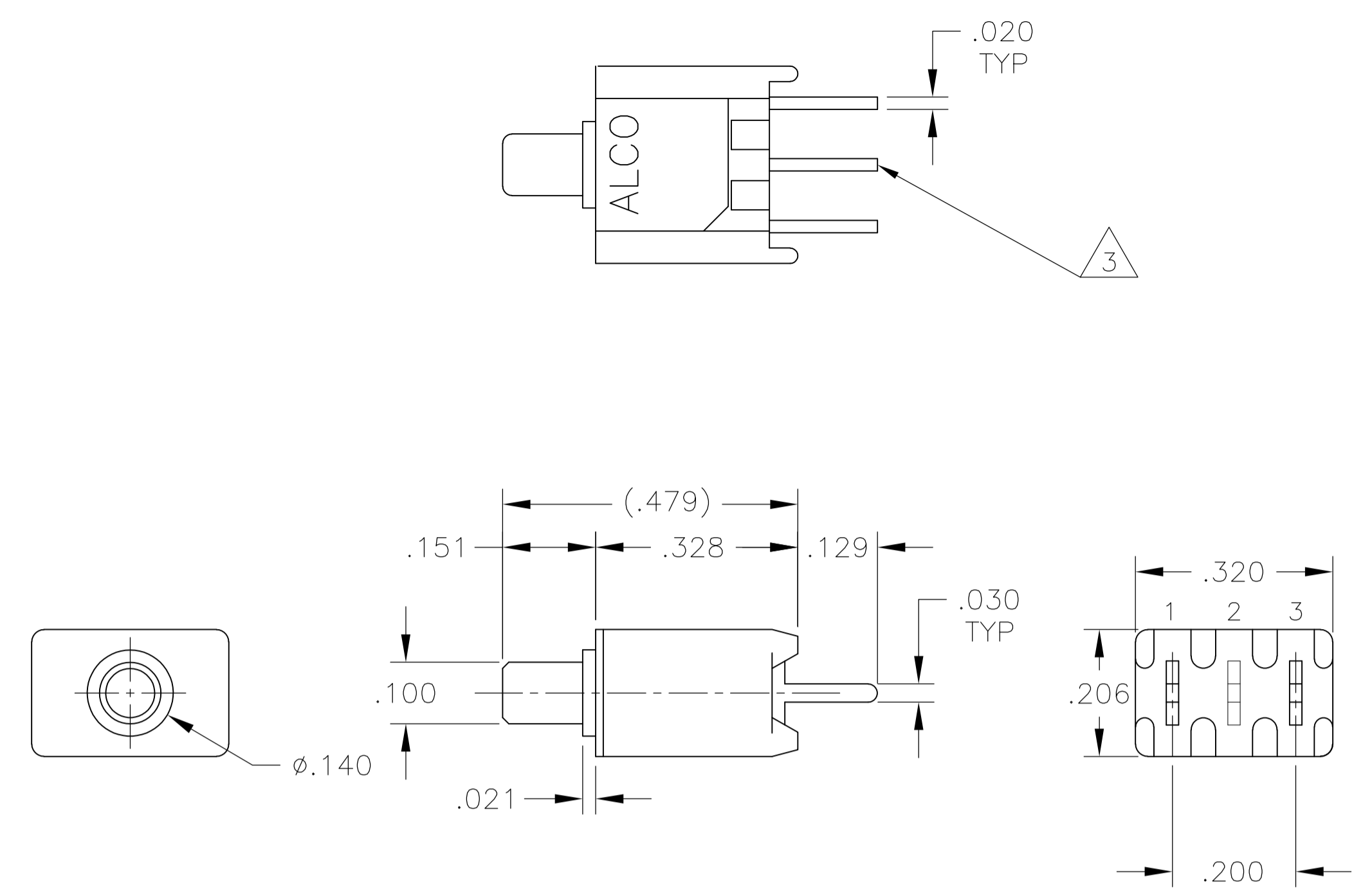
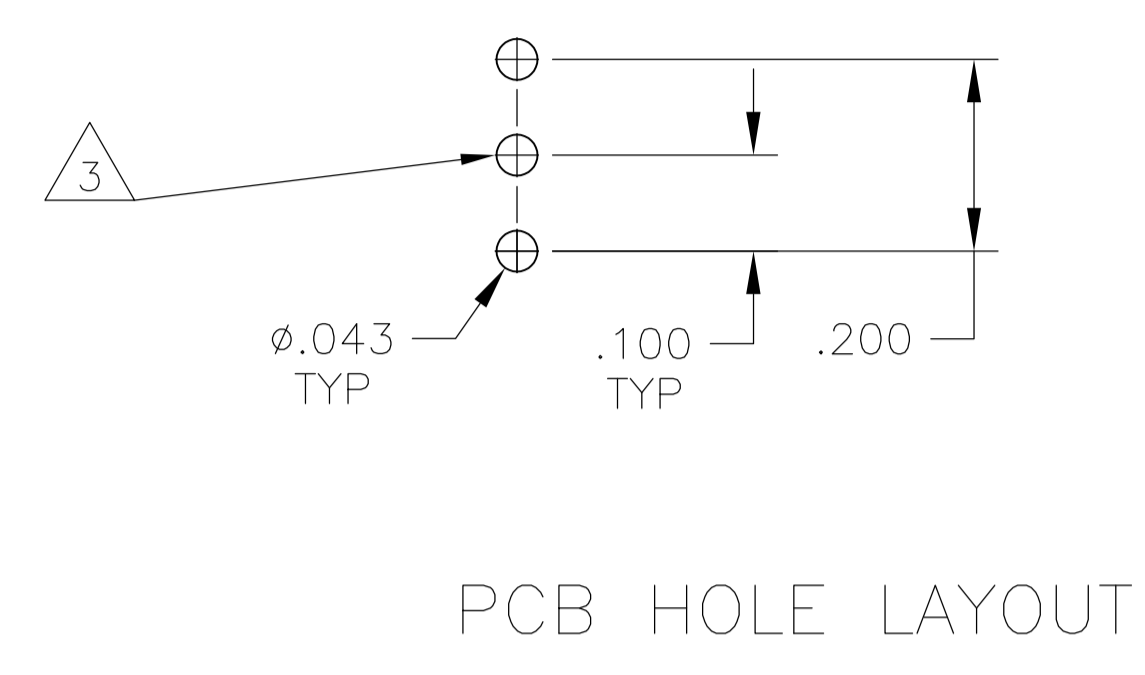
Specifications	
Rating	Gold: .4VA max. @ 20VDC or peak AC resistive Silver: 1 A @ 125VAC or 28 VDC resistive
Initial termination resistance	20 milliohms max.
Insulation resistance	1,000 Megohms min @ 500 VDC
Dielectric strength	1,000 volts RMS at sea level
Timing	Break before make
Plunger travel	.030
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

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
4 1825096-2	TPA11CGPC204	1	1	Gold	PC	Red	Off	Mom	Off	1-3
4 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
4 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
4 1825096-8	TPA11FGPC204	1	2	Gold	PC	Red	On	Mom	1-2	2-3
4 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
4 1-1825096-1	TPA11FGRA204	1	2	Gold	Right Angle	Red	On	Mom	1-2	2-3
4 1-1825096-2	TPA11FGRA604	1	2	Gold	Right Angle	Blue	On	Mom	1-2	2-3
4 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
4 1-1825096-5	TPA21FFGRA204	2 (1+1)	2	Gold	Right Angle	Red	On	Mom	1-2, 4-5	2-3, 5-6
4 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.

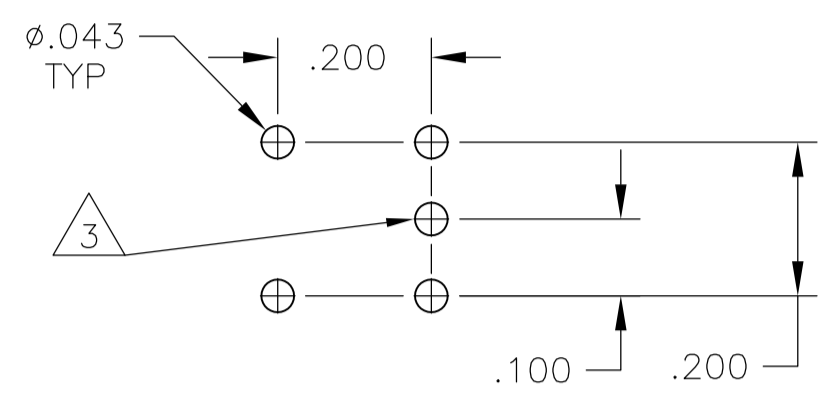
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**STE** TE Connectivity  
PUSHBUTTON SWITCH, TPA SERIES

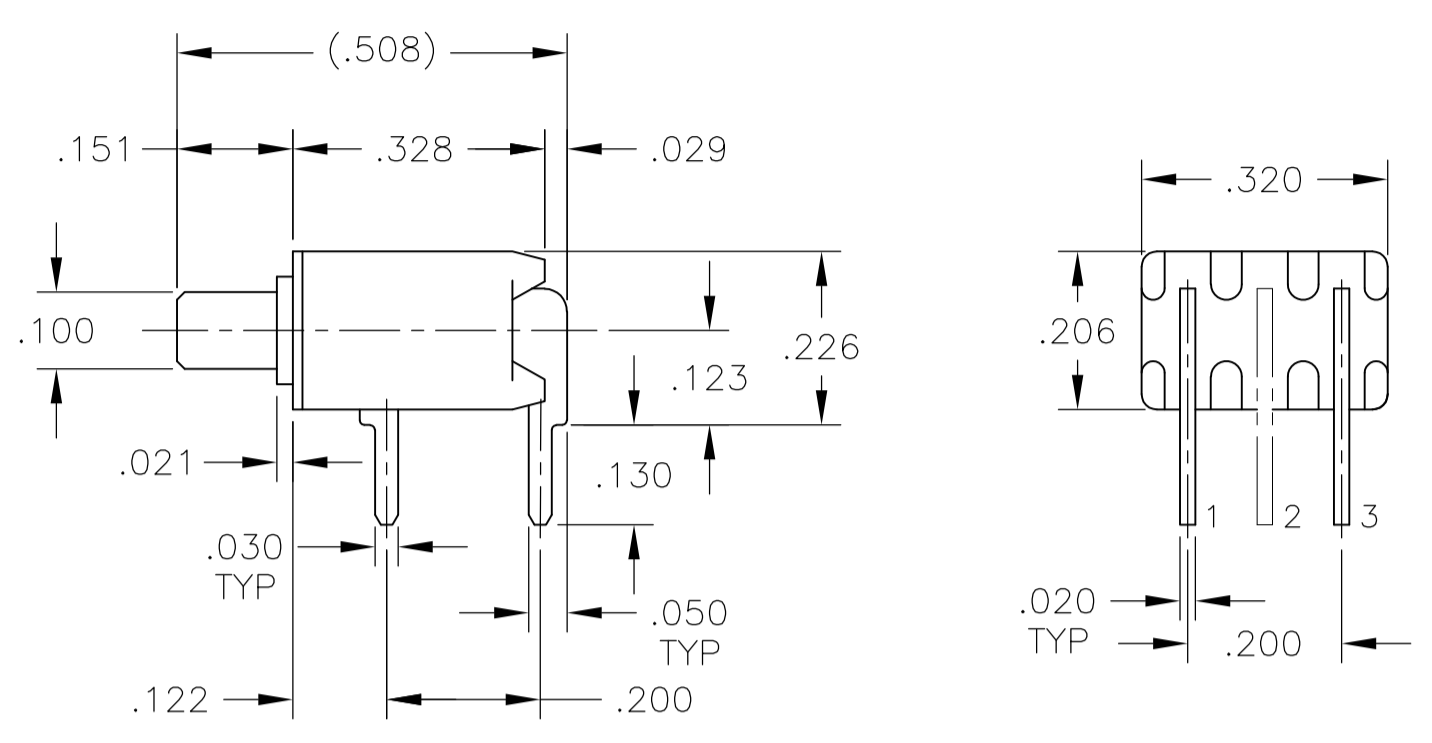
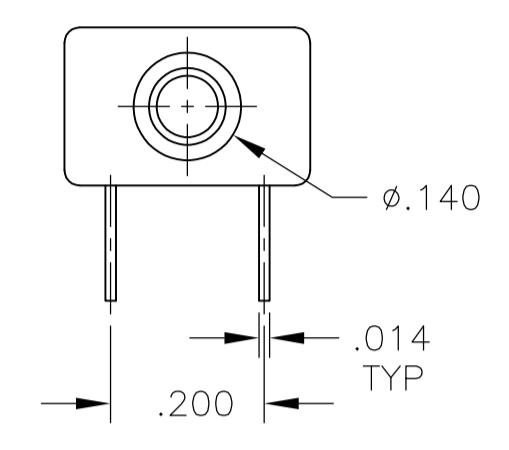


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0 PLC	± -	PRODUCT SPEC		PUSHBUTTON SWITCH, TPA SERIES	
1 PLC	± -	APPLICATION SPEC		SIZE CAGE CODE DRAWING NO	
2 PLC	± -	MATERIAL		RESTRICTED TO	
3 PLC	± .010	FINISH		A1 00779 ©=1825096	
4 PLC	± -	MATERIAL		CUSTOMER DRAWING	
ANGLES	± -	WEIGHT		SCALE 4:1 SHEET 2 OF 4 REV A2	

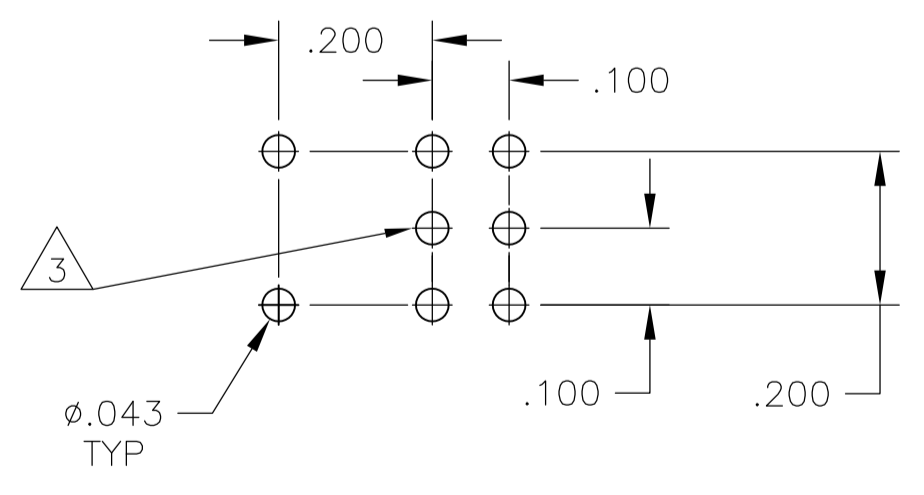
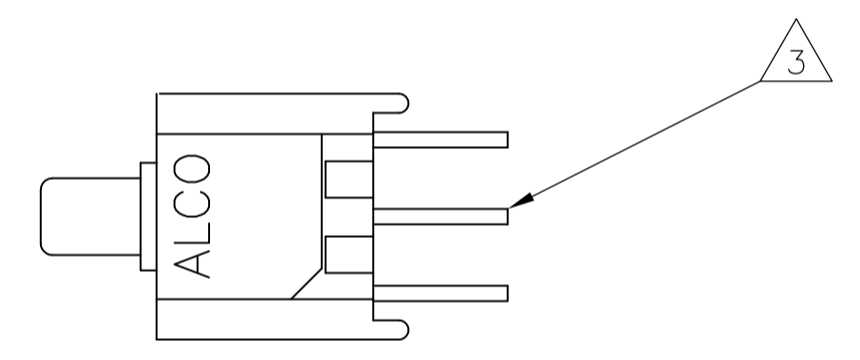
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P	LTR	DESCRIPTION	DATE	DNW	APVD		
-	-	SEE SHEET 1	-	-	-		



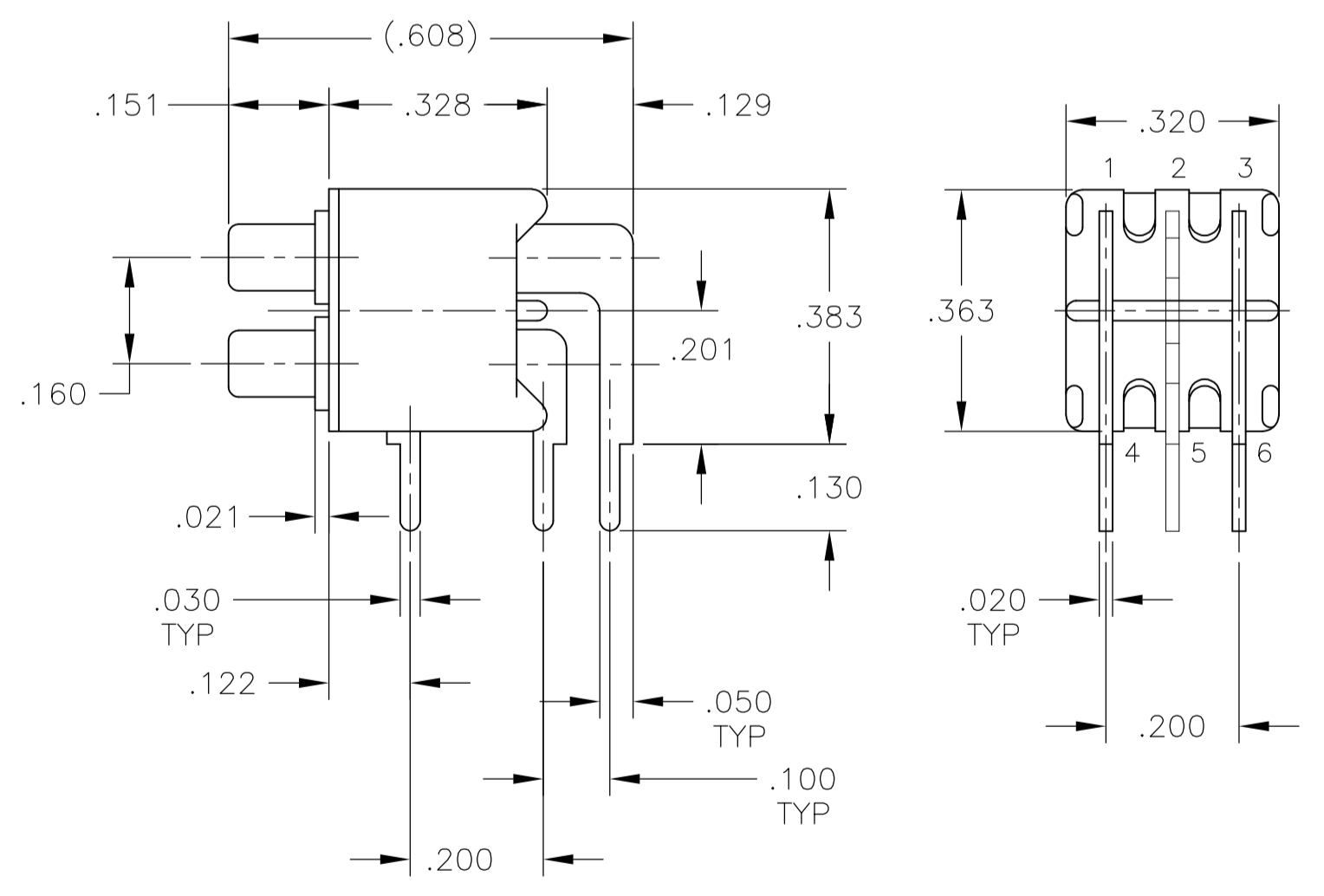
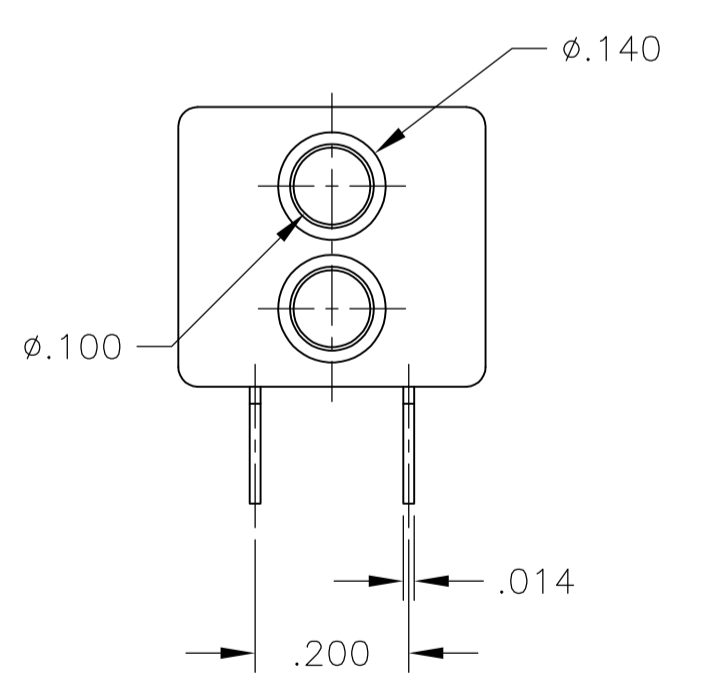
PCB HOLE LAYOUT



TPA11CGRA  
TPA11FGRA

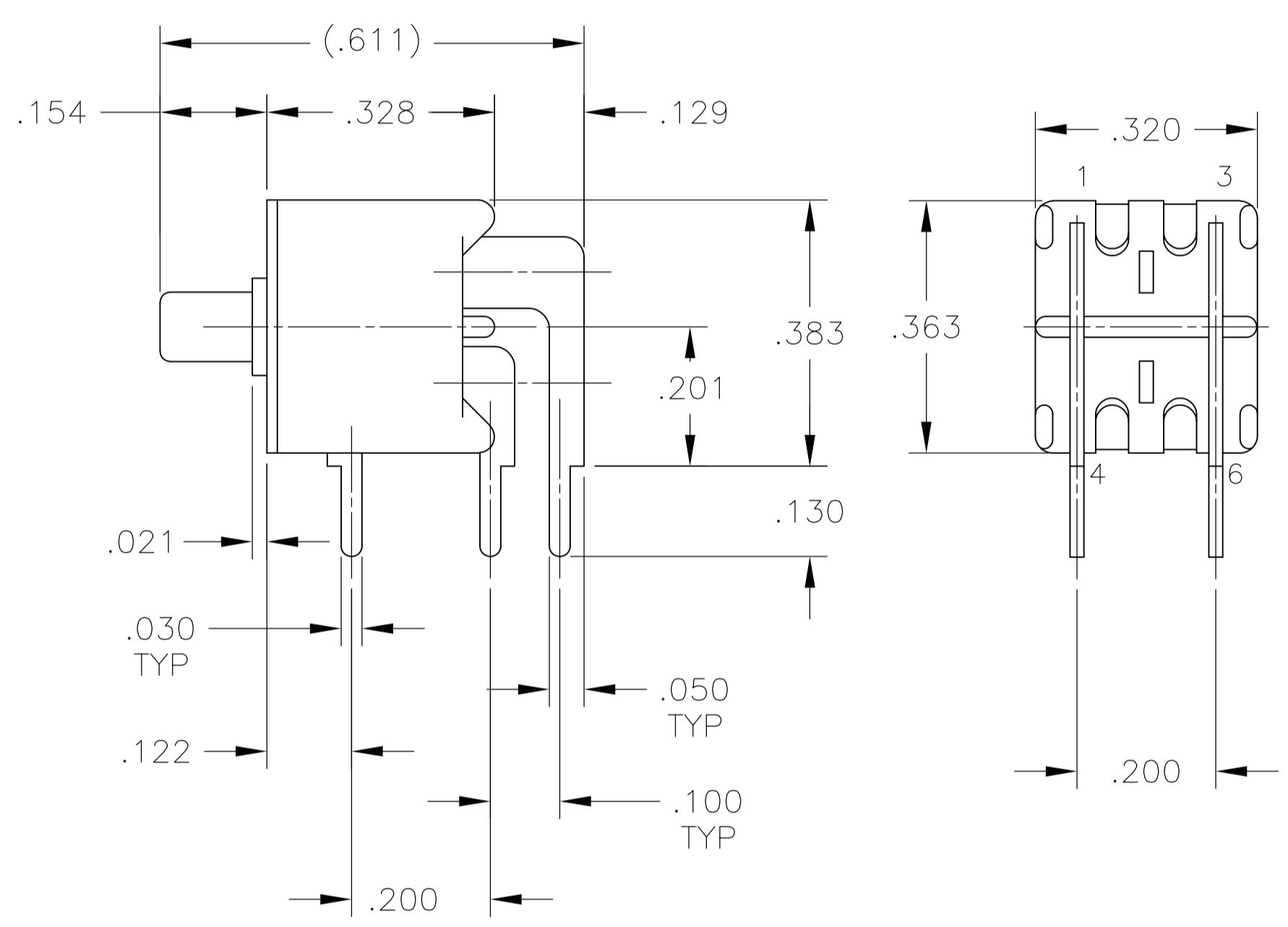
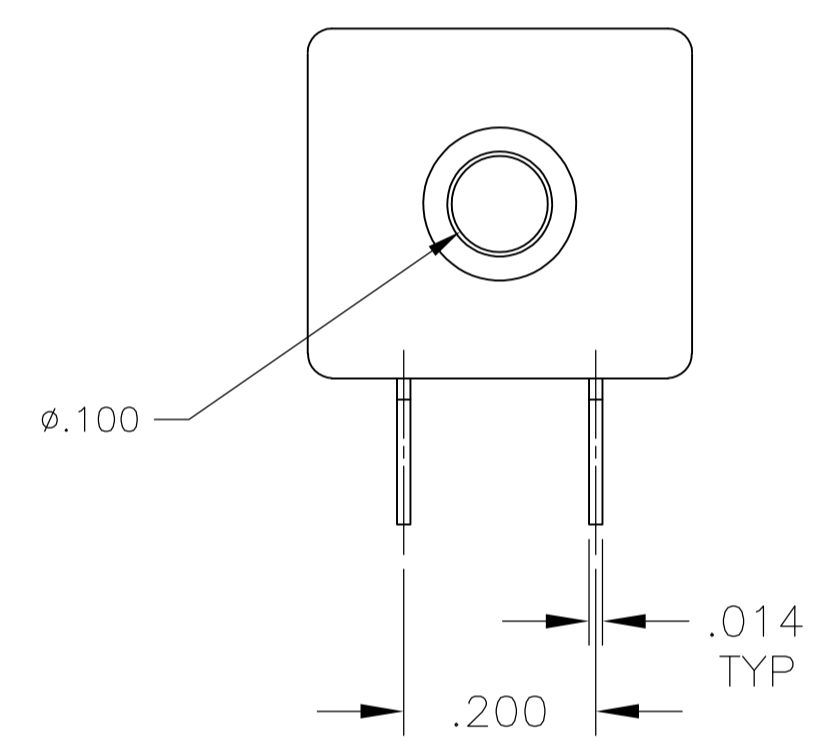
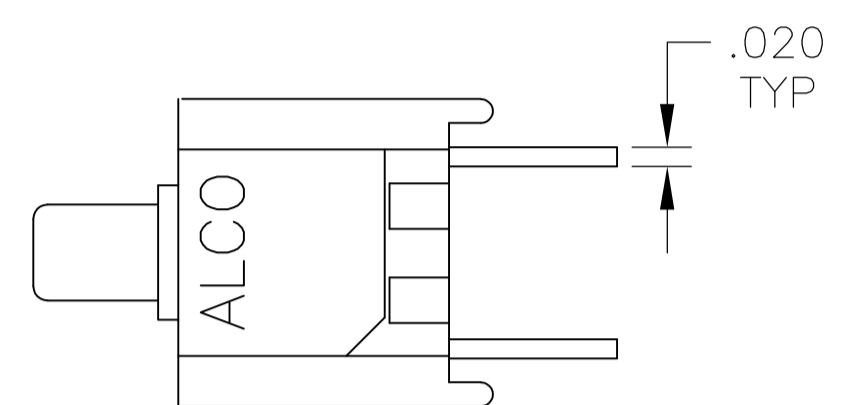


PCB HOLE LAYOUT

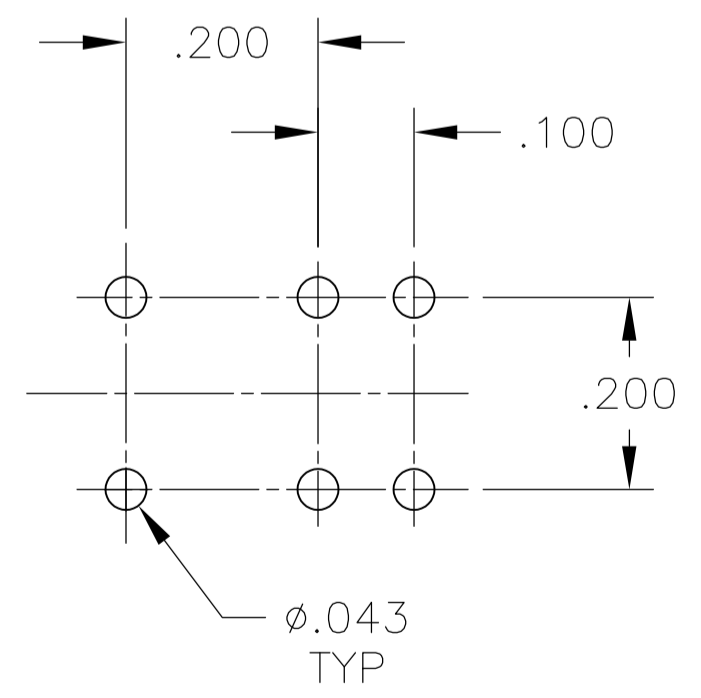


TPA21CCGRA  
TPA21FFGRA

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TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPD M. ZITTO 21JUL05		NAME	
0. PLC ± -		PRODUCT SPEC		PUSHBUTTON SWITCH, TPA SERIES	
1. PLC ± -		APPLICATION SPEC		SIZE CASE CODE DRAWING NO	
2. PLC ± -		WEIGHT		A1 00779 C=1825096	
3. PLC ± .010		CUSTOMER DRAWING		SCALE 4:1 SHEET 3 OF 4 REV A2	
4. PLC ± -					
ANGLES ± -					
MATERIAL -					
FINISH -					



TPA21MGRA



PCB HOLE LAYOUT

THIS DRAWING IS A CONTROLLED DOCUMENT.		DIN	M. BINNER	01SEP05	 TE Connectivity
		CHK	M. ZITTO	21JUL05	
		APP'D	M. ZITTO	21JUL05	NAME
		TOLERANCES UNLESS OTHERWISE SPECIFIED:			PRODUCT SPEC
DIMENSIONS:		0. PLC ± -			APPLICATION SPEC
INCHES		1. PLC ± -			RESTRICTED TO
		2. PLC ± -			SIZE
		3. PLC ± .010			CAGE CODE
		4. PLC ± -			DRAWING NO
		ANGLES ± -			WEIGHT
					SCALE
					SHEET
					OF
					REV
					A2
					1825096
					100779
					A1
					CUSTOMER DRAWING

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