

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

P/N	Alco P/N	Poles	Throws	Plating	Terminals	Button Color	Function		Connected Terminals	
							ALCO	ALCO	ALCO	ALCO
1825096-1	TPA11CGPC004	1	1	Gold	PC	Black	Off	Mom	Off	1-3
1825096-2	TPA11CGPC204	1	1	Gold	PC	Red	Off	Mom	Off	1-3
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
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
1825096-8	TPA11FGPC204	1	2	Gold	PC	Red	On	Mom	1-2	2-3
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
1-1825096-1	TPA11FGRA204	1	2	Gold	Right Angle	Red	On	Mom	1-2	2-3
1-1825096-2	TPA11FGRA604	1	2	Gold	Right Angle	Blue	On	Mom	1-2	2-3
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
1-1825096-5	TPA21FFGRA204	2 (1+1)	2	Gold	Right Angle	Red	On	Mom	1-2, 4-5	2-3, 5-6
1-1825096-6	TPA21MGRA004	2	1	Gold	Right Angle	Black	Off	Mom	Off	1-3, 4-6

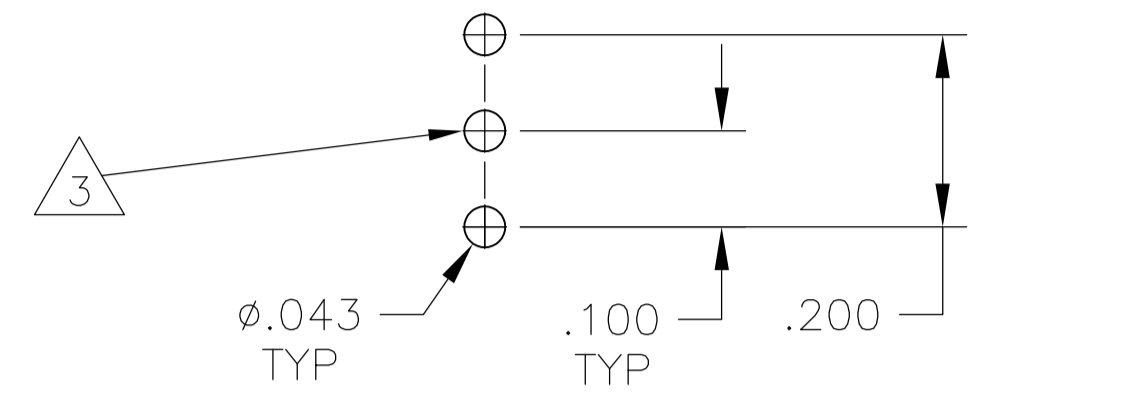
NOTES:

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.

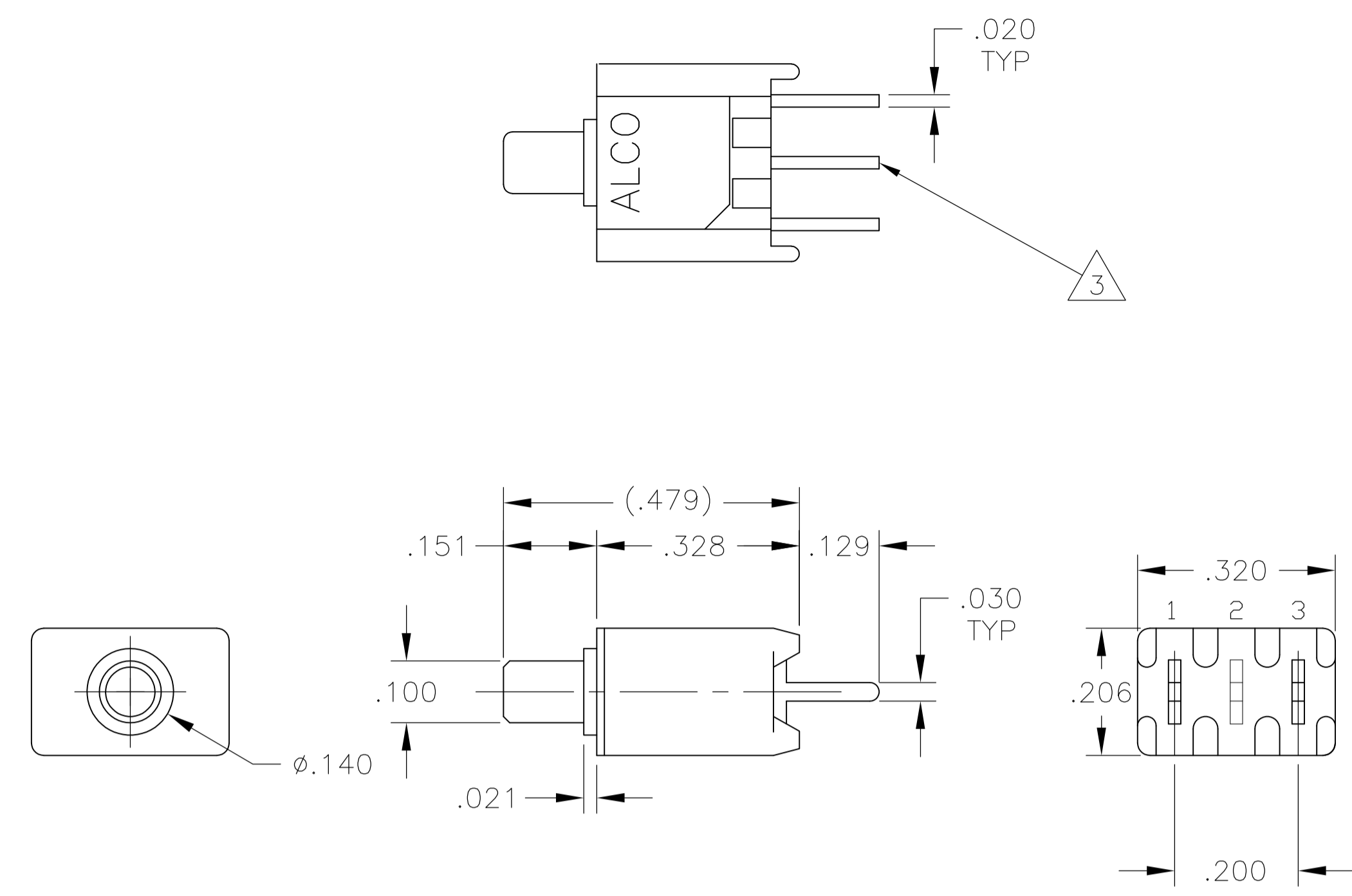
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STE TE Connectivity. M. BINNER 01SEP05. M. ZITTO 21JUL05. M. ZITTO 21JUL05. NAME: PUSHBUTTON SWITCH, TPA SERIES. PRODUCT SPEC: -. APPLICATION SPEC: -. SIZE: A1. CASE CODE: 00779. DRAWING NO: 1825096.

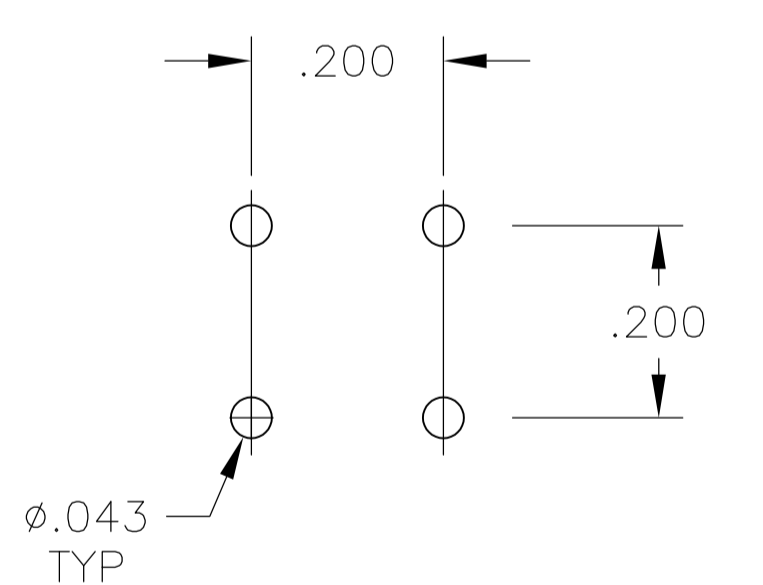
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P	LTR	DESCRIPTION	DATE	DNW	APVD		
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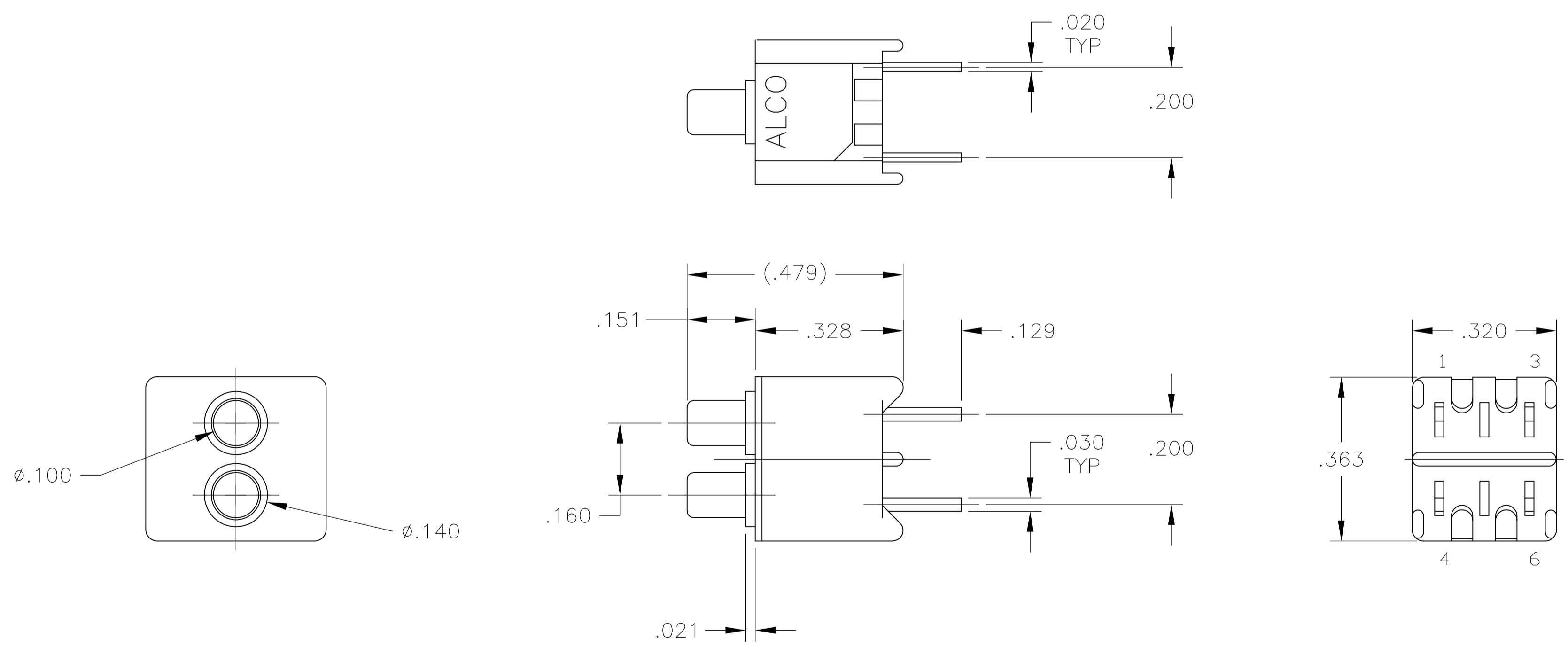
PCB HOLE LAYOUT



TPA11CGPC  
TPA11FGPC



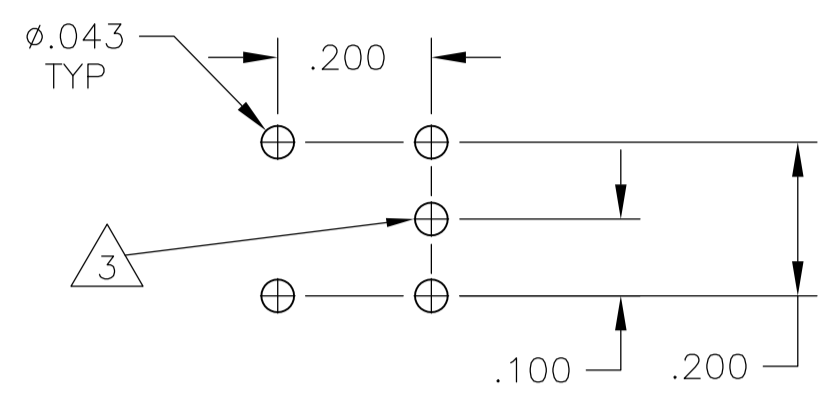
PCB HOLE LAYOUT



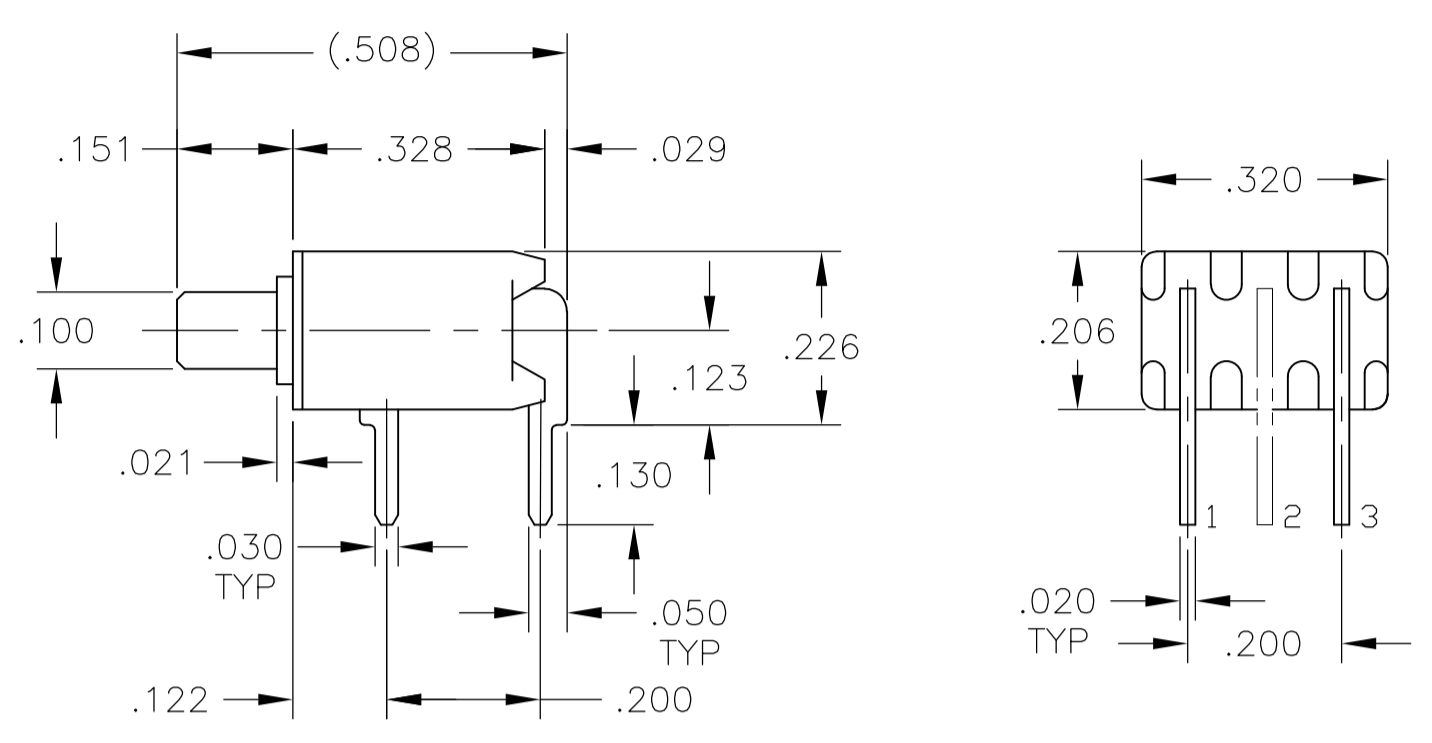
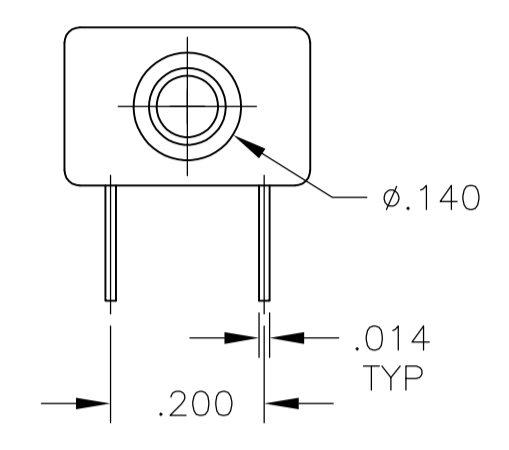
TPA21CCGPC

THIS DRAWING IS A CONTROLLED DOCUMENT.		DIN M. BINNER 21JUL05	STE TE Connectivity																		
DIMENSIONS: INCHES		CHK M. ZITTO 21JUL05	NAME PUSHBUTTON SWITCH, TPA SERIES																		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD M. ZITTO 21JUL05	PRODUCT SPEC																		
<table border="1"> <tr><td>0. PLC</td><td>±</td><td>-</td></tr> <tr><td>1. PLC</td><td>±</td><td>-</td></tr> <tr><td>2. PLC</td><td>±</td><td>-</td></tr> <tr><td>3. PLC</td><td>±</td><td>.010</td></tr> <tr><td>4. PLC</td><td>±</td><td>-</td></tr> <tr><td>ANGLES</td><td>±</td><td>-</td></tr> </table>		0. PLC	±	-	1. PLC	±	-	2. PLC	±	-	3. PLC	±	.010	4. PLC	±	-	ANGLES	±	-	APPLICATION SPEC	
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1. PLC	±	-																			
2. PLC	±	-																			
3. PLC	±	.010																			
4. PLC	±	-																			
ANGLES	±	-																			
MATERIAL		SIZE A1	CAGE CODE 00779	DRAWING NO. 1825096																	
FINISH		WEIGHT		RESTRICTED TO																	
		CUSTOMER DRAWING		SCALE 4:1 SHEET 2 OF 4 REV A1																	

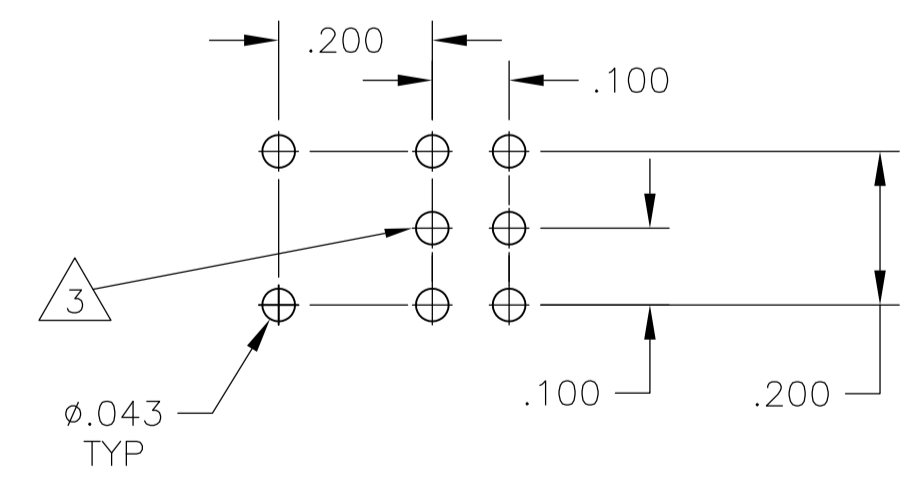
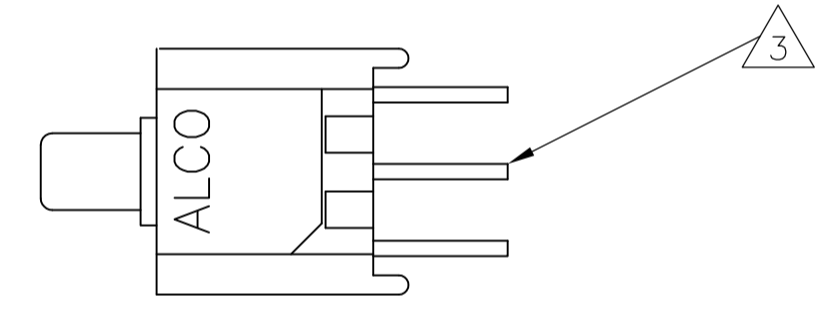
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P	LTR	DESCRIPTION	DATE	DNW	APVD
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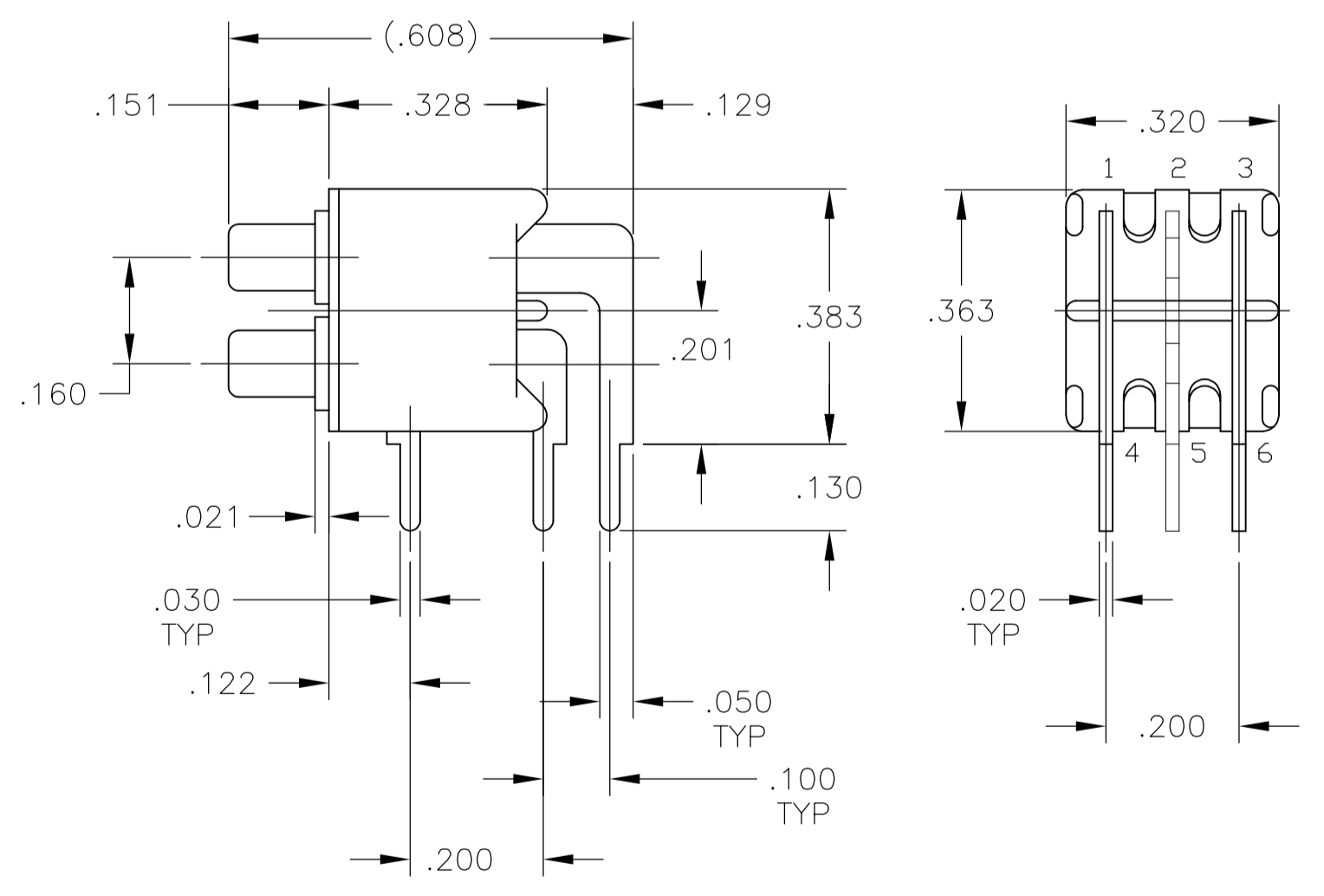
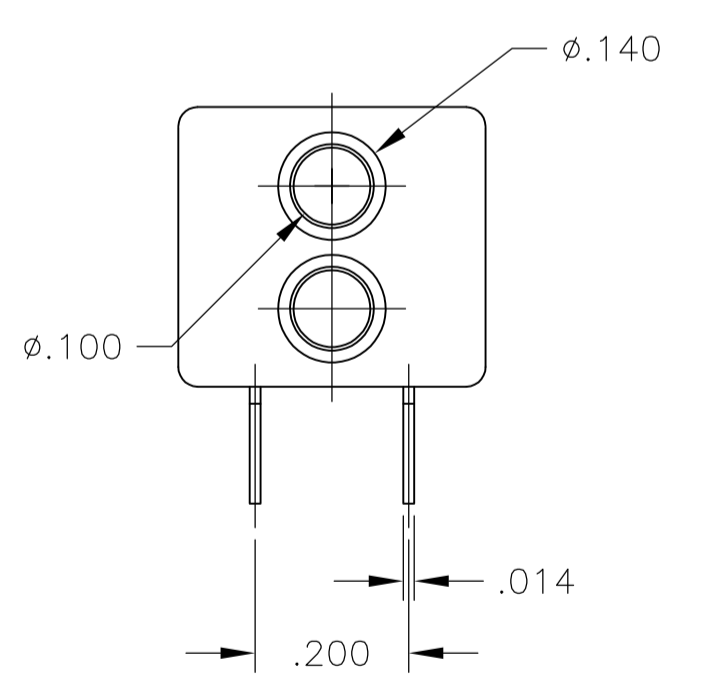
PCB HOLE LAYOUT



TPA11CGRA  
TPA11FGRA

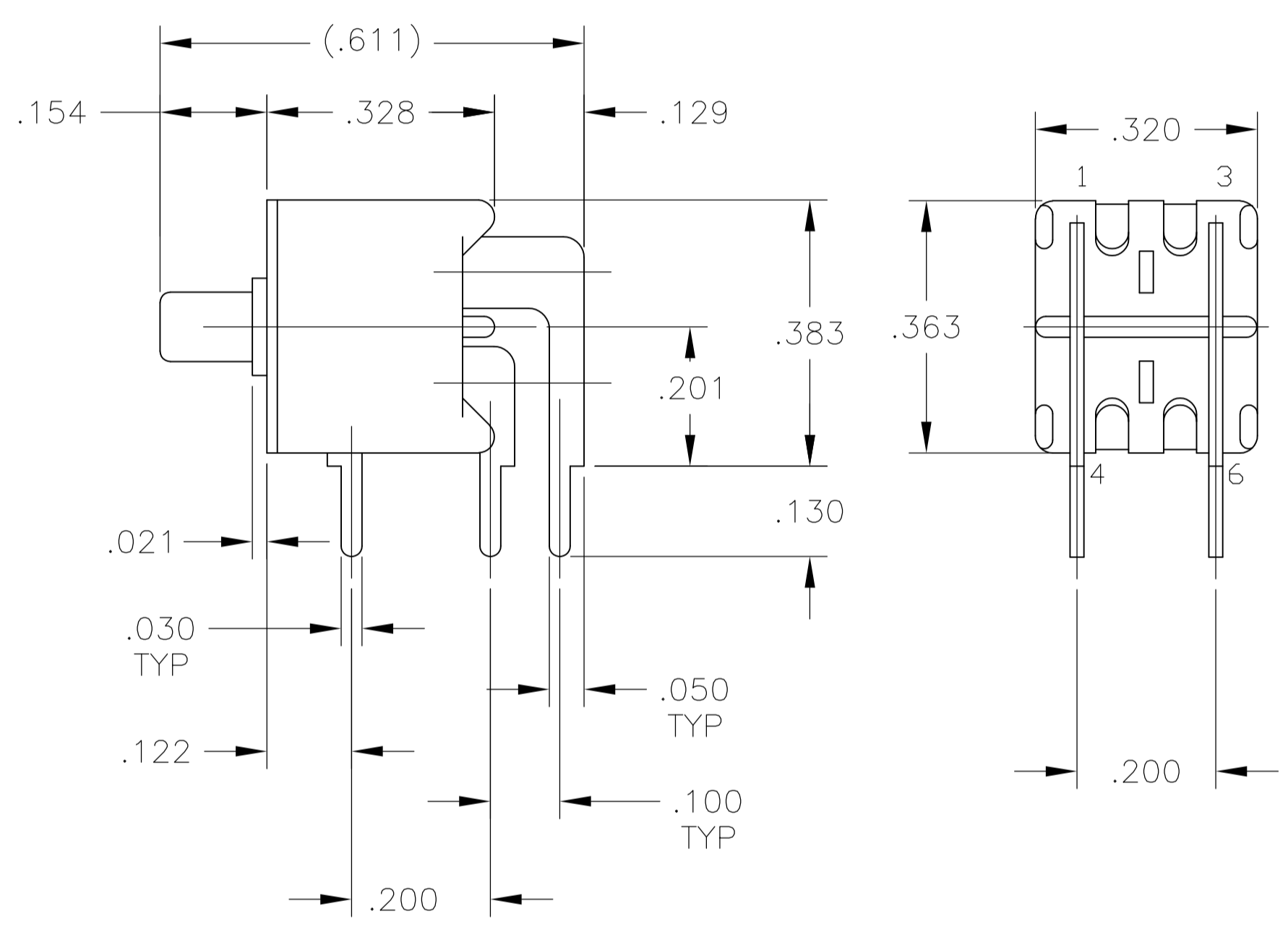
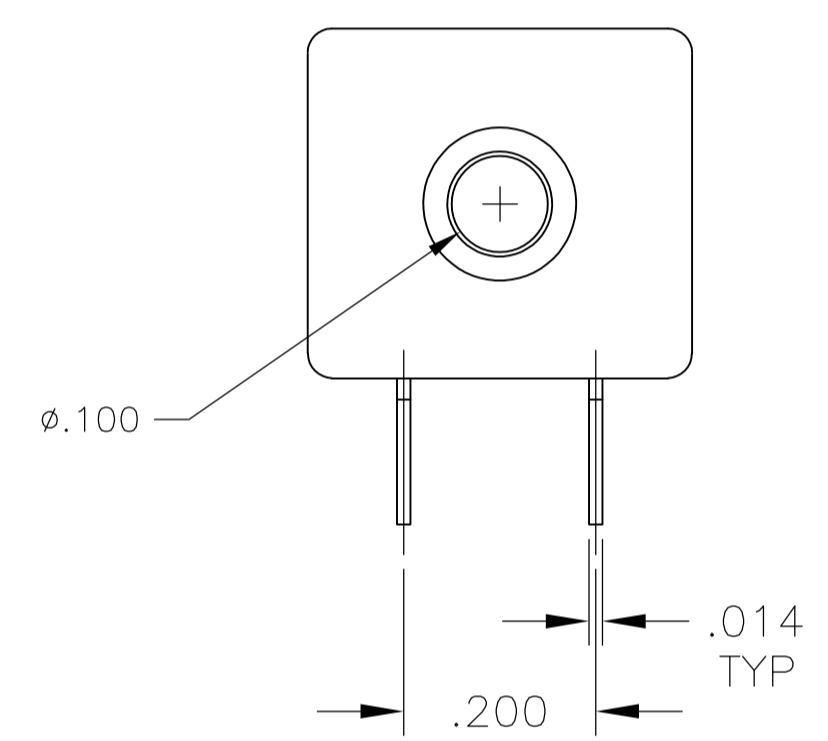
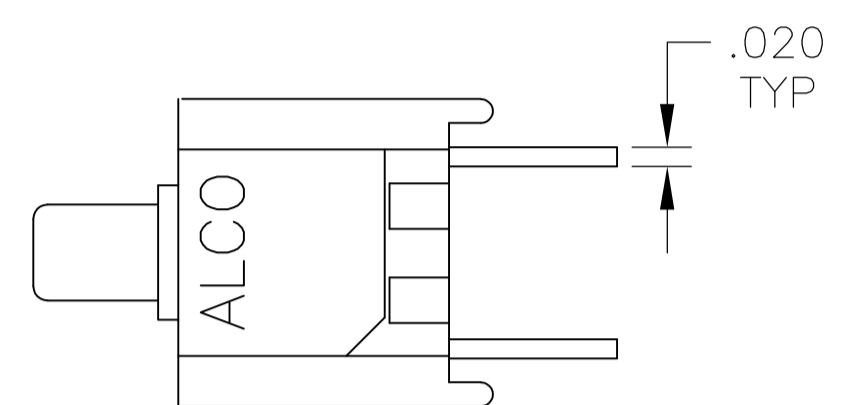


PCB HOLE LAYOUT

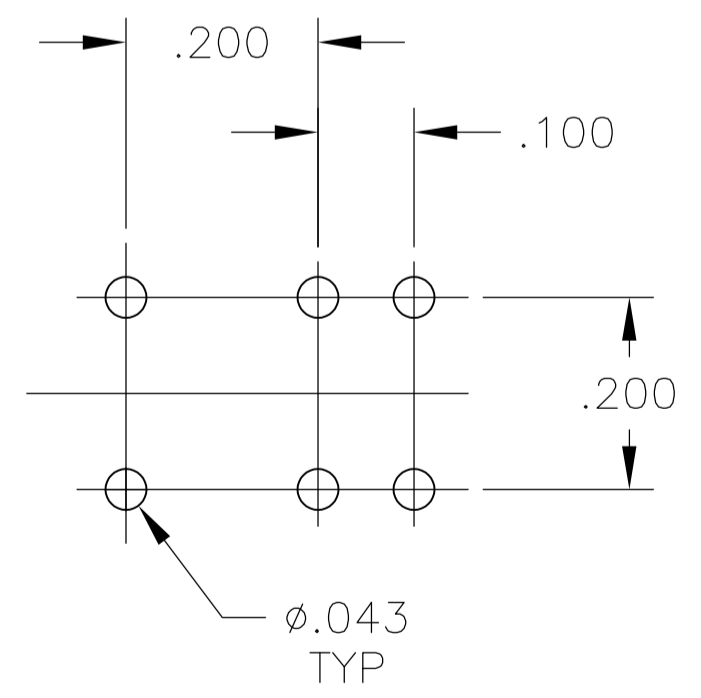


TPA21CCGRA  
TPA21FFGRA

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TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPD M. ZITTO 21JUL05	PRODUCT SPEC	
0. PLC ± - 1. PLC ± - 2. PLC ± - 3. PLC ± .010 4. PLC ± - ANGLES ± -		APPLICATION SPEC	RESTRICTED TO	
MATERIAL	FINISH	WEIGHT	SIZE A1	CAGE CODE 00779
CUSTOMER DRAWING		SCALE 4:1	SHEET 3 OF 4	REV A1



TPA21MGRA



PCB HOLE LAYOUT

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