

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

Tyco 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:

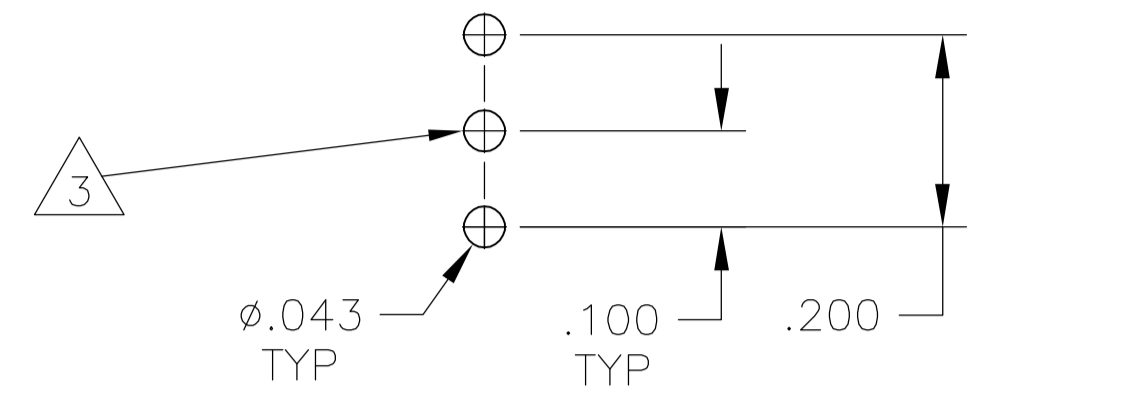
1. TERMINAL NUMBERS ARE FOR REFERENCE ONLY AND DO NOT APPEAR ON SWITCHES
2. ALL MATERIALS AND FINISHES COMPLY WITH EU DIRECTIVE 2002/95/EC OF 27JAN2003 (ROHS).
3. CENTER TERMINAL PRESENT ON DOUBLE THROW SWITCHES ONLY.

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: SCALE: 4:1 SHEET 1 OF 4 REV A

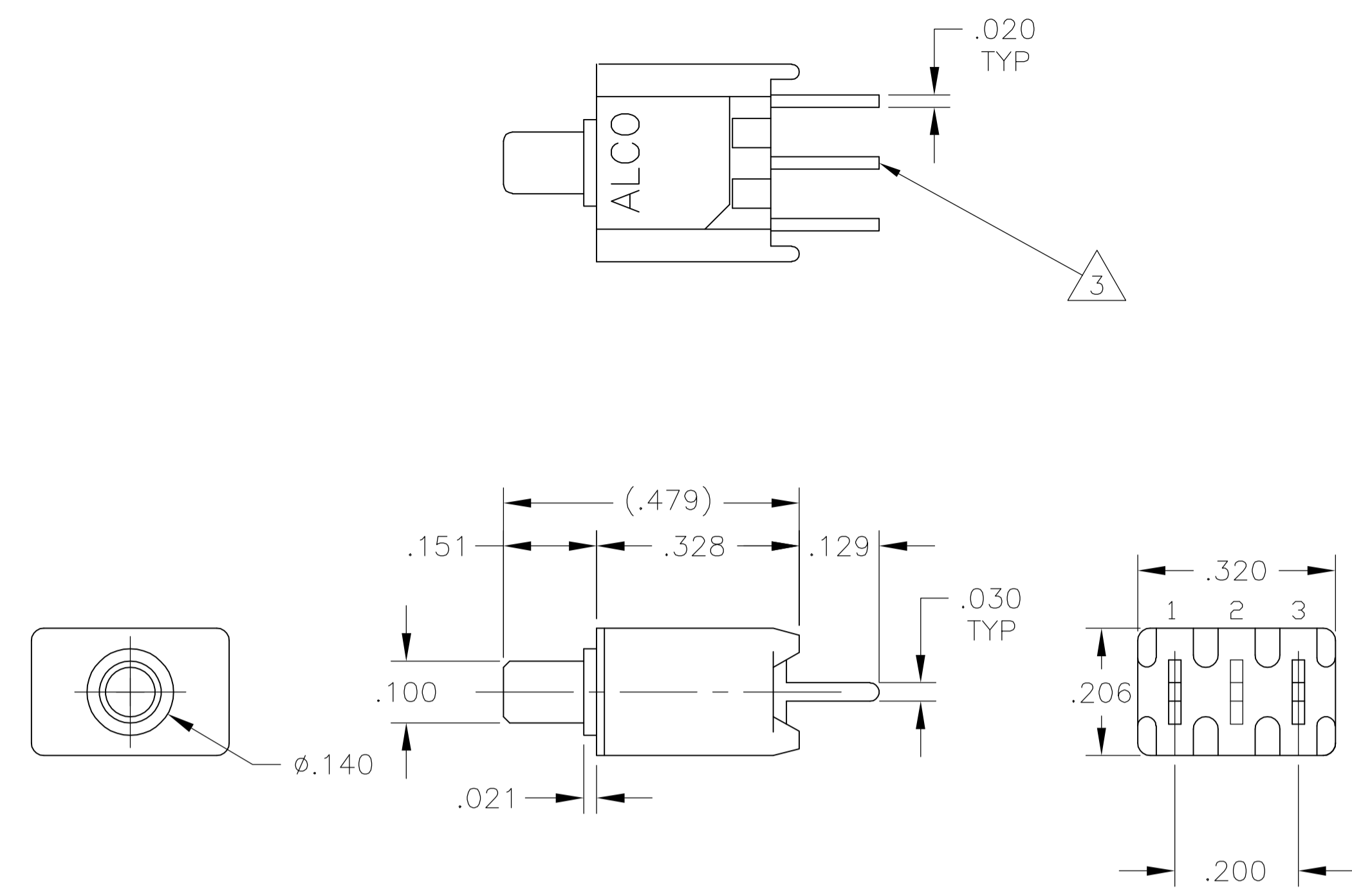
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 CHK M. ZITTO 21JUL05  
 APVD M. ZITTO  
 NAME M. ZITTO  
 PRODUCT SPEC  
 APPLICATION SPEC  
 SIZE: A1  
 CASE CODE: 00779  
 DRAWING NO: 1825096  
 RESTRICTED TO: CUSTOMER DRAWING

tyco Electronics Tyco Electronics Corporation Harrisburg, Pa 17105-3608  
 PUSHBUTTON SWITCH, TPA SERIES

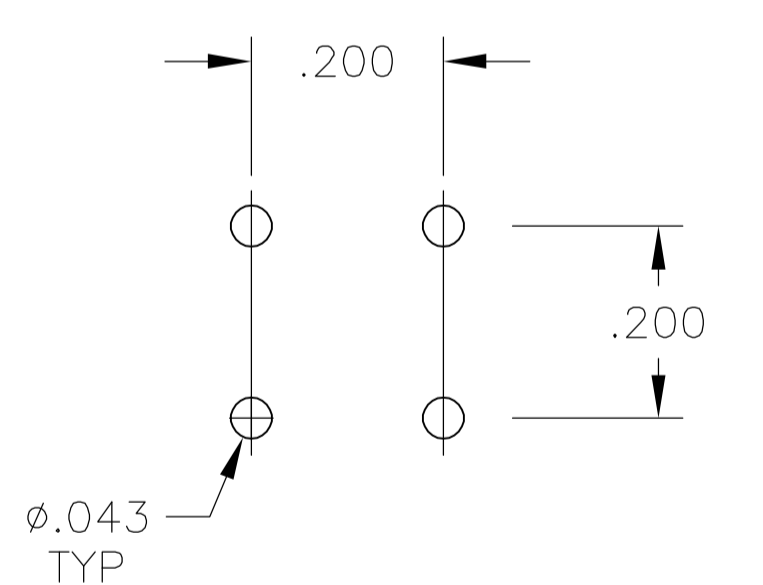
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				SEE SHEET 1			



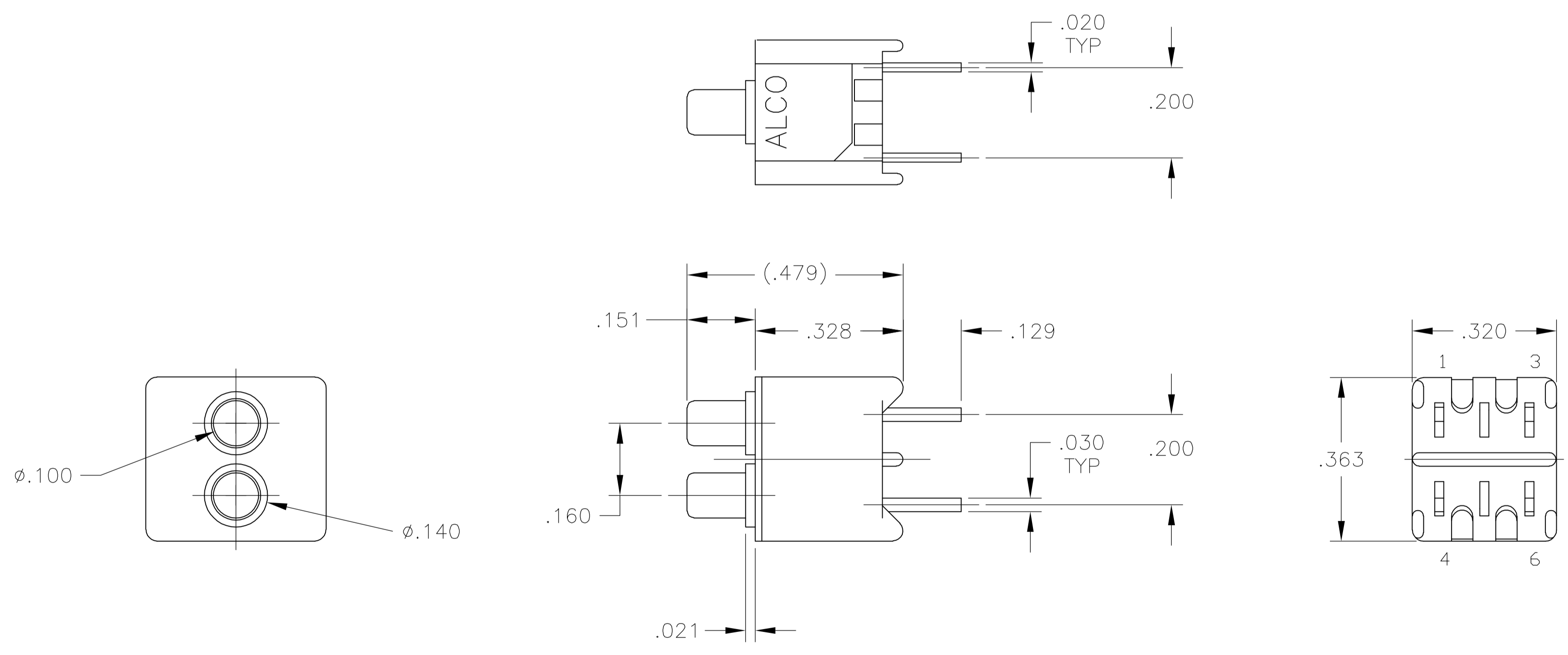
PCB HOLE LAYOUT



TPA11CGPC  
TPA11FGPC



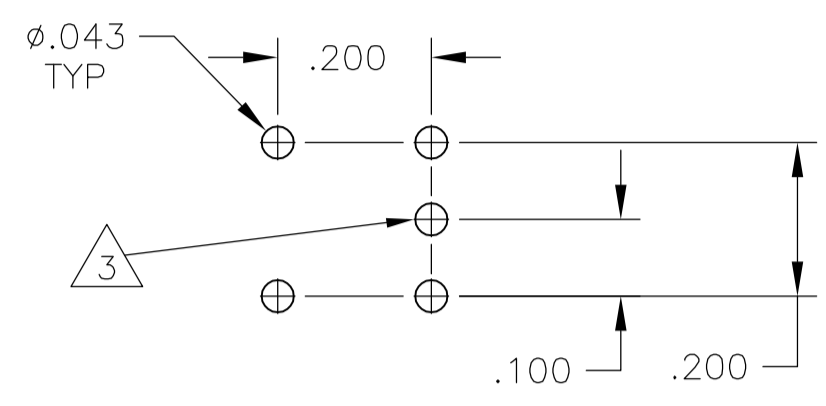
PCB HOLE LAYOUT



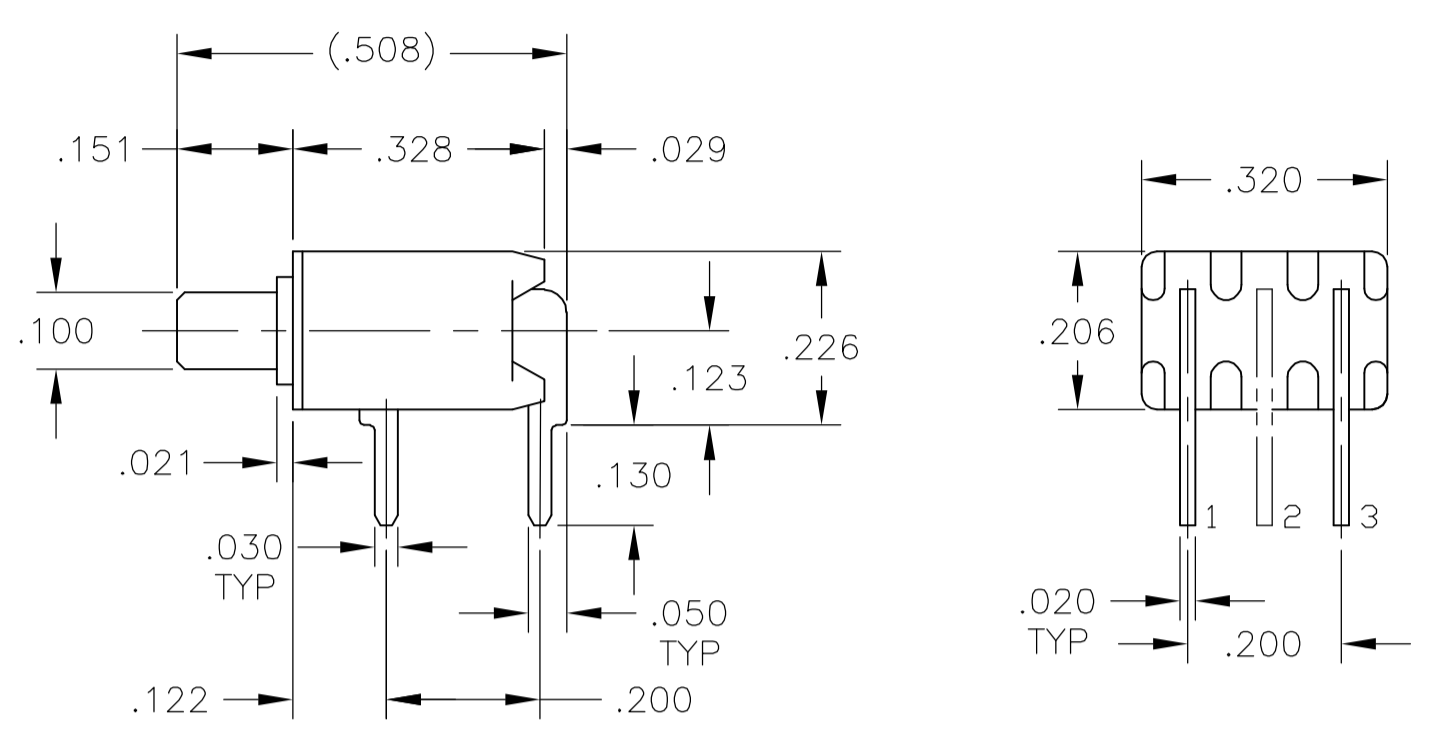
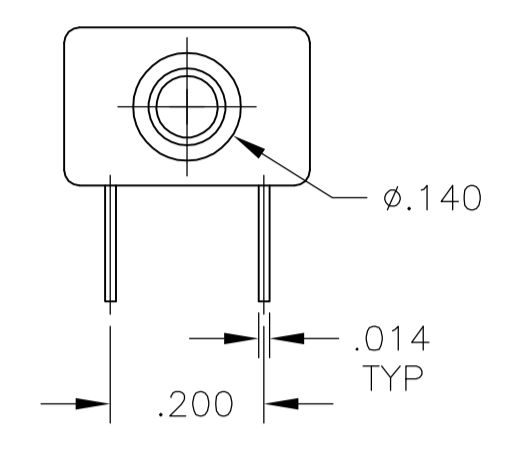
TPA21CCGPC

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN M. BINNER 21JUL05	01SEP05	 Tyco Electronics Corporation Harrisburg, Pa 17105-3608
DIMENSIONS: INCHES		CHK M. ZITTO 21JUL05	APVD M. ZITTO	
DIMENSIONS: INCHES TOLERANCES UNLESS OTHERWISE SPECIFIED: 0. PLC ± - 1. PLC ± - 2. PLC ± - 3. PLC ± .010 4. PLC ± - ANGLES ± -		PRODUCT SPEC APPLICATION SPEC SIZE WEIGHT		NAME PUSHBUTTON SWITCH, TPA SERIES RESTRICTED TO
MATERIAL		CUSTOMER DRAWING SCALE 4:1 SHEET 2 OF 4 REV A		DRAWING NO A1 00779 C=1825096

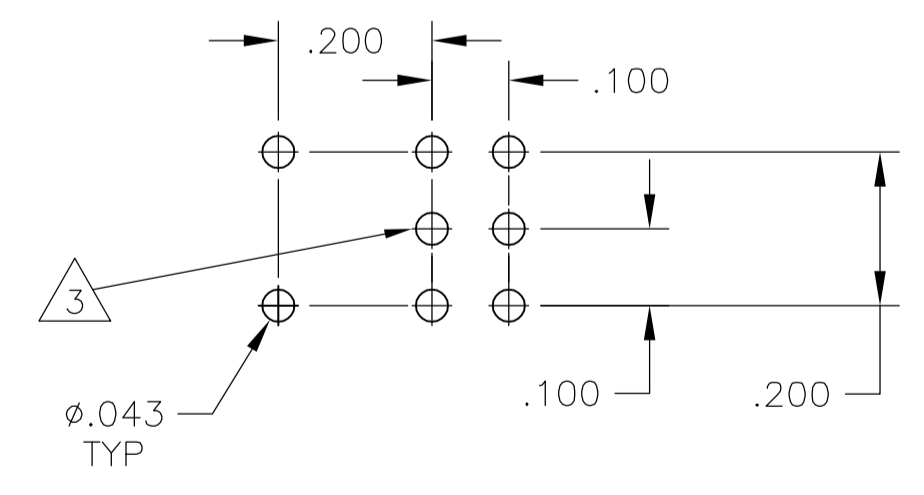
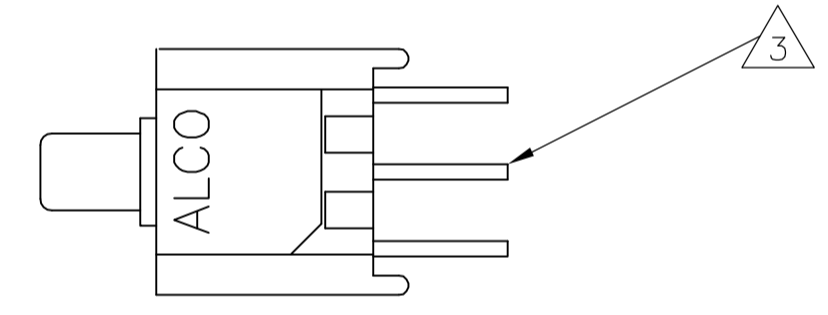
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AD		P	LTR	DESCRIPTION	DATE	DWN	APVD
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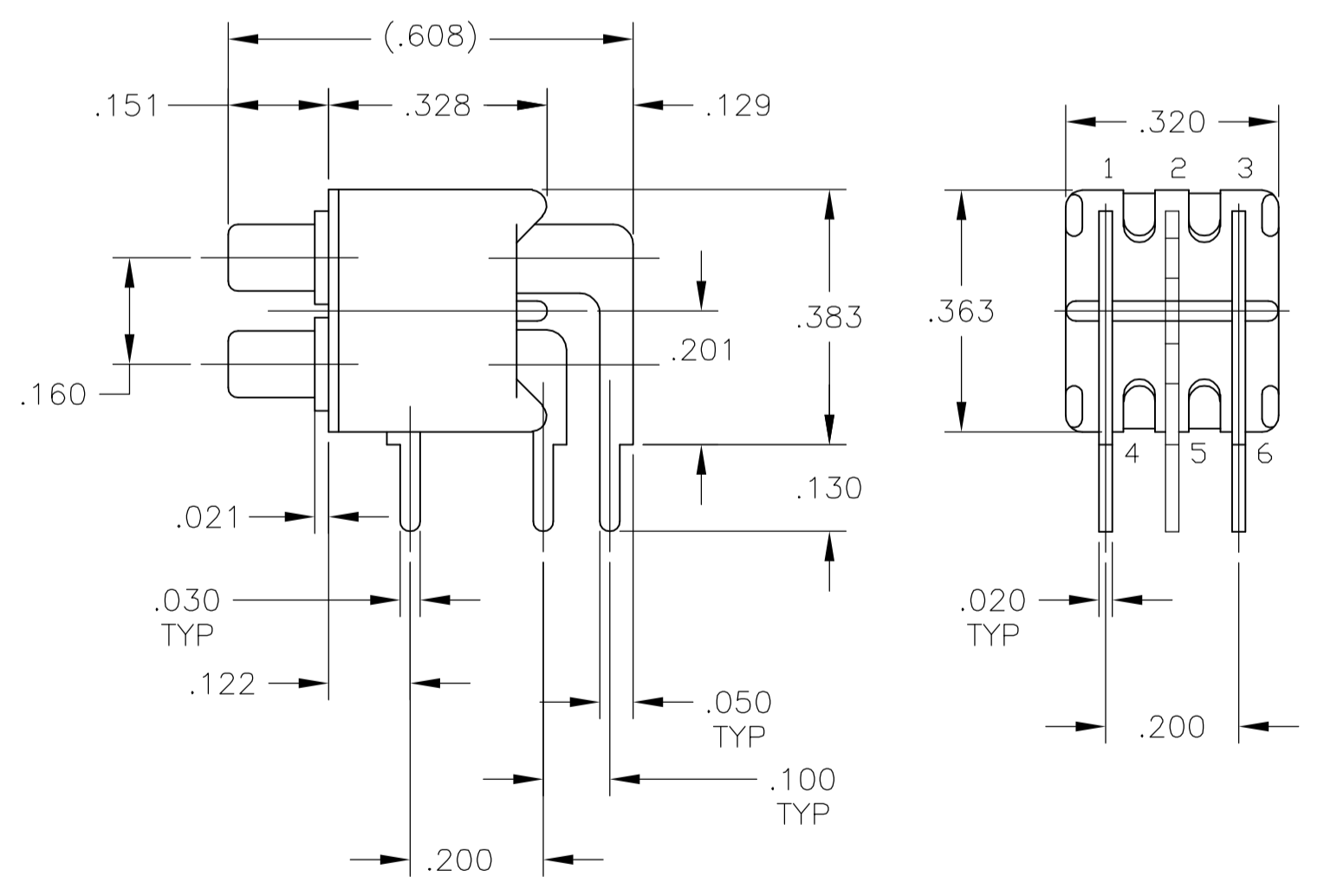
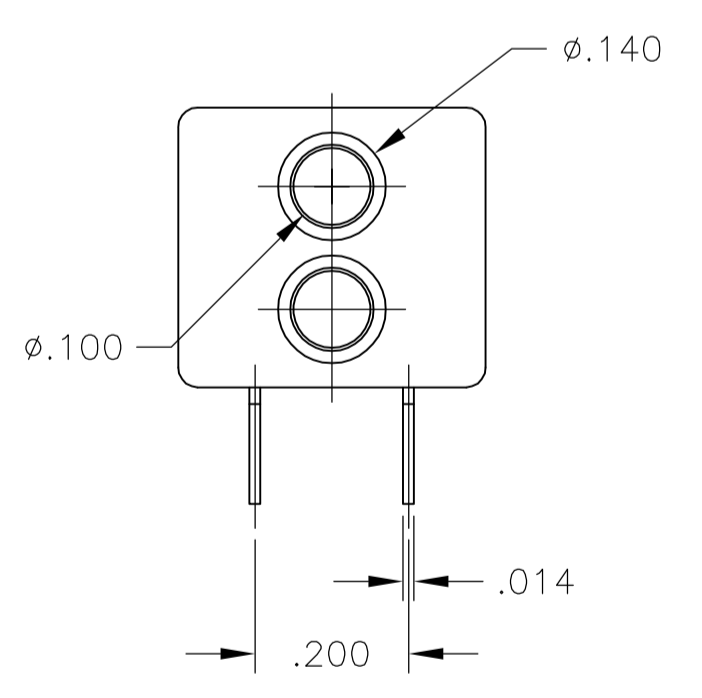
PCB HOLE LAYOUT



TPA11CGRA  
TPA11FGRA

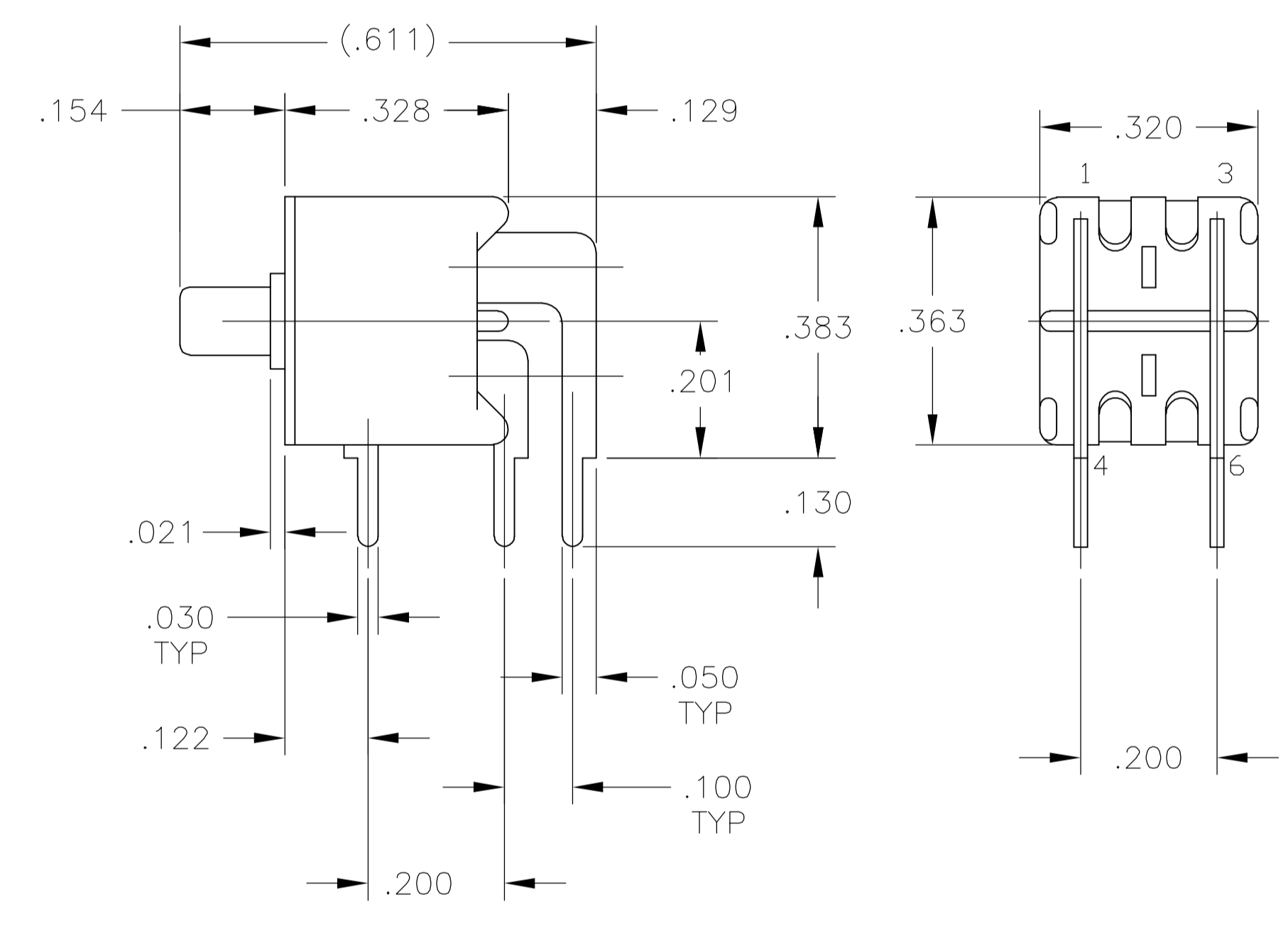
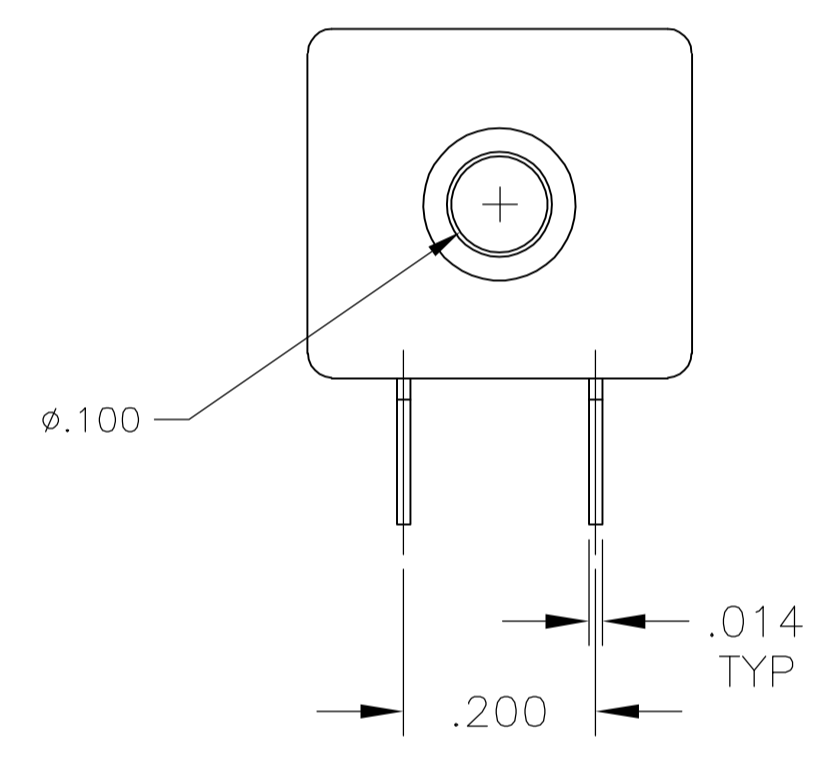
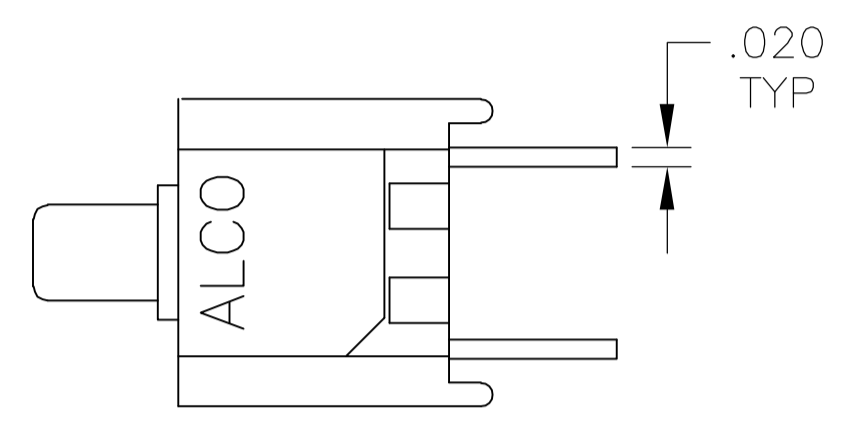


PCB HOLE LAYOUT

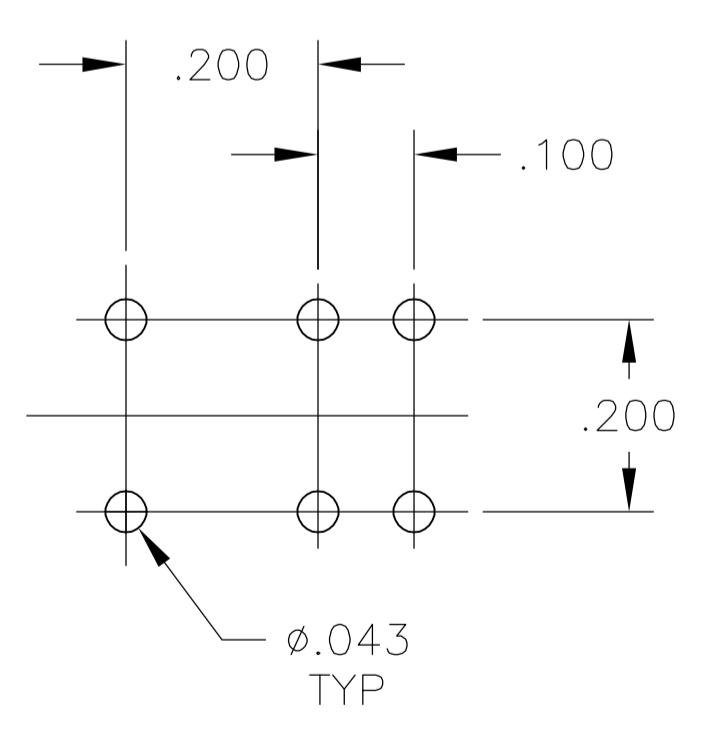


TPA21CCGRA  
TPA21FFGRA

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DIMENSIONS: INCHES		CHK M. ZITTO 21JUL05	APVD M. ZITTO 21JUL05	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0. PLC ± - 1. PLC ± - 2. PLC ± - 3. PLC ± .010 4. PLC ± - ANGLES ± -		NAME PUSHBUTTON SWITCH, TPA SERIES		RESTRICTED TO
MATERIAL		WEIGHT		SIZE A1
FINISH		CUSTOMER DRAWING		SCALE 4:1 SHEET 3 OF 4 REV A
		DRAWING NO 00779		DRAWING NO 1825096



TPA21MGRA



PCB HOLE LAYOUT

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN M. BINNER	01SEP05		Tyco Electronics Corporation Harrisburg, Pa 17105-3608																								
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MATERIAL -		FINISH -	WEIGHT -	SIZE A1	CAGE CODE 00779	DRAWING NO 1825096	SCALE 4:1	SHEET 4	OF 4	REV A																			
CUSTOMER DRAWING																													