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LOCAD

DIST00

REVISED PER ECO-11-004917

DATE11MAR11

DWNRK

APVDHMR

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	

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

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.

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		
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

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

MATERIAL-

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ± -

1 PLC ± -

2 PLC ± -

3 PLC ± .010

4 PLC ± -

ANGLES ± -

FINISH-

THIS DRAWING IS A CONTROLLED DOCUMENT.

DWNM.BINNER01SEP05

CHKM.ZITTO21JUL05

APVDM.ZITTO21JUL05

PRODUCT SPEC

APPLICATION SPEC

WEIGHT-

CUSTOMER DRAWING

TE Connectivity

NAMEPUSHBUTTON SWITCH, TPA SERIES

SIZEA1

CAGE CODE00779

DRAWING NO1825096

RESTRICTED TO-

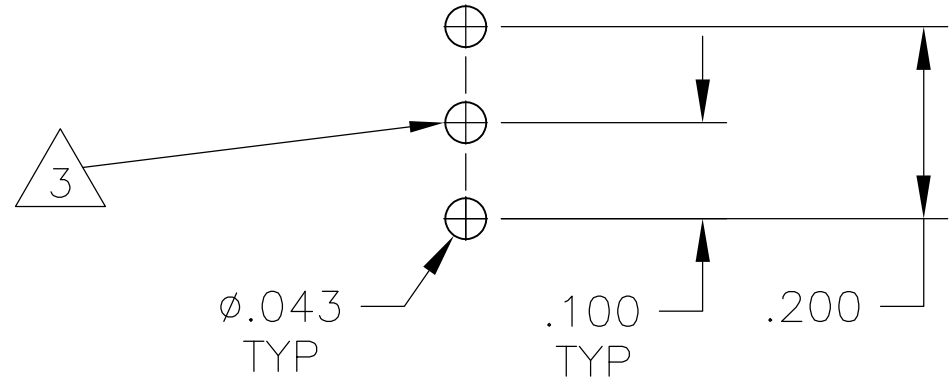
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SHEET1 OF 4

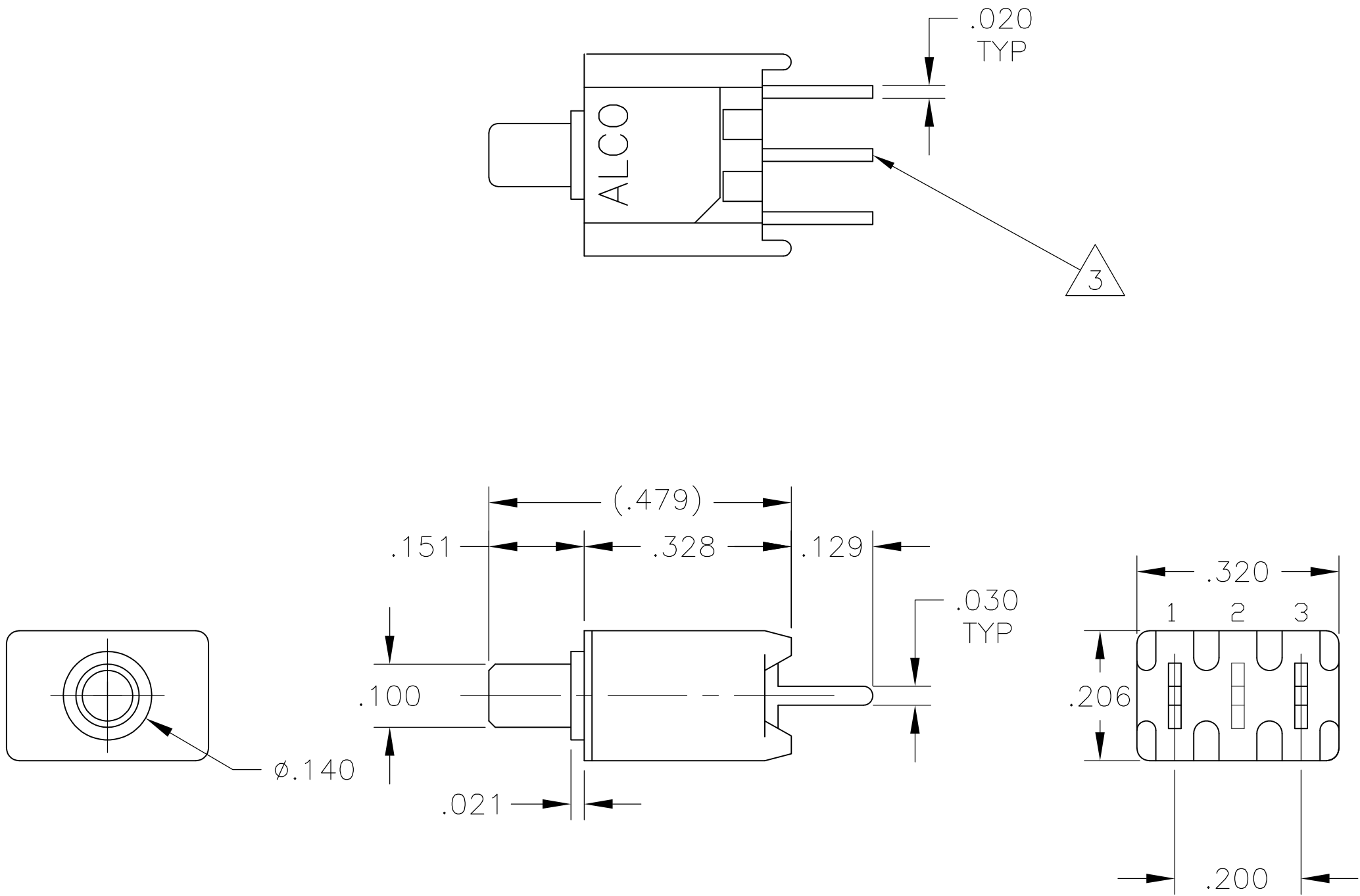
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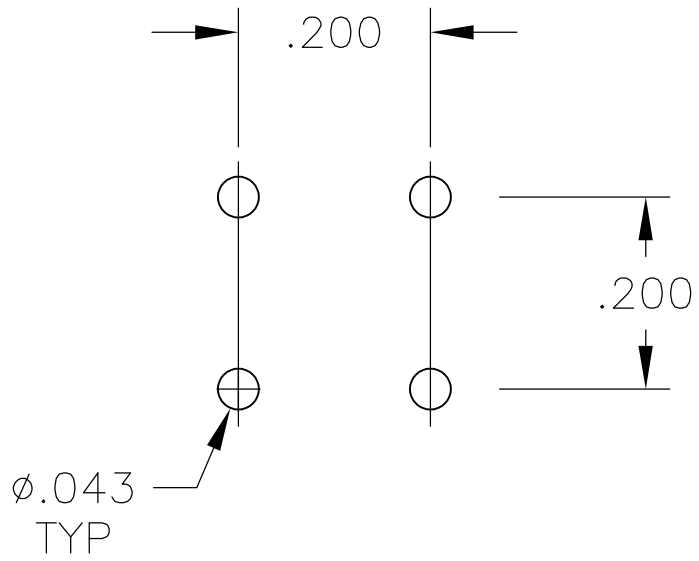
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AD	—	P	LTR	DESCRIPTION	DATE	DWN
		—	—	SEE SHEET 1	—	—



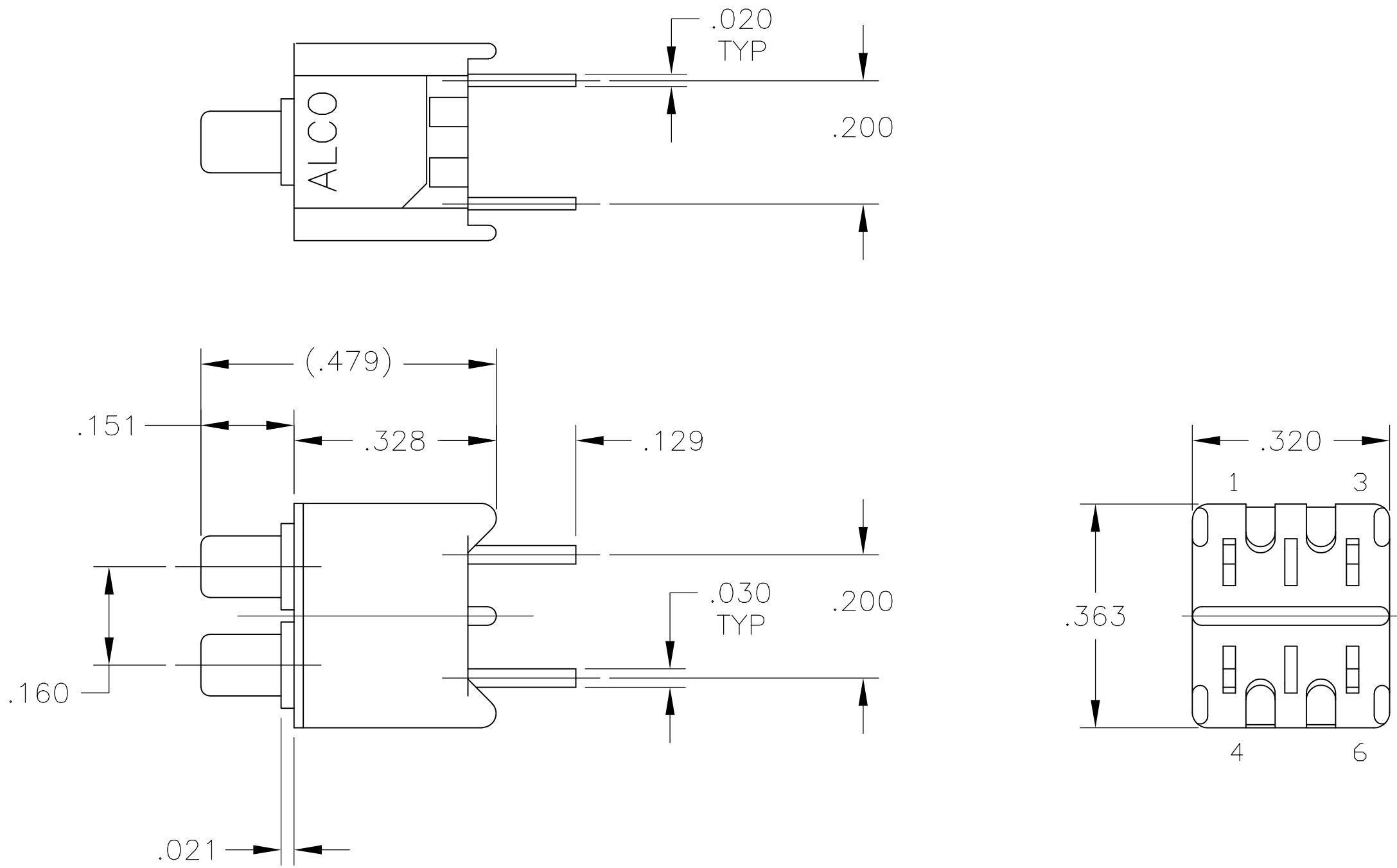
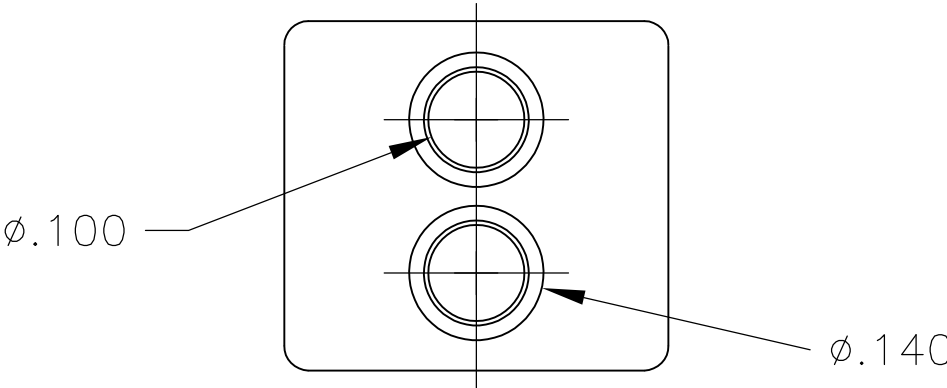
PCB HOLE LAYOUT



TPA11CGPC
TPA11FGPC



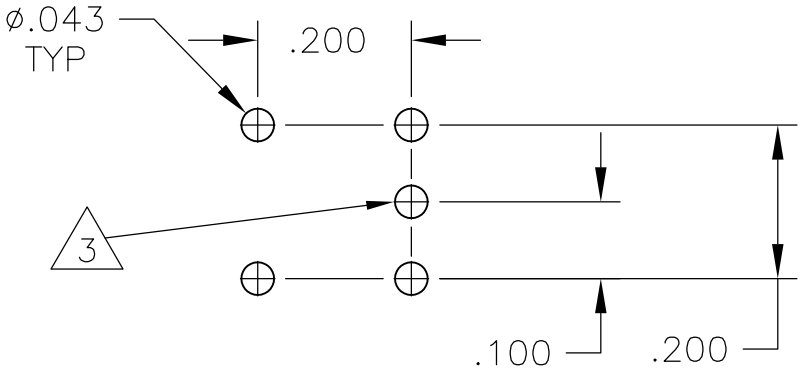
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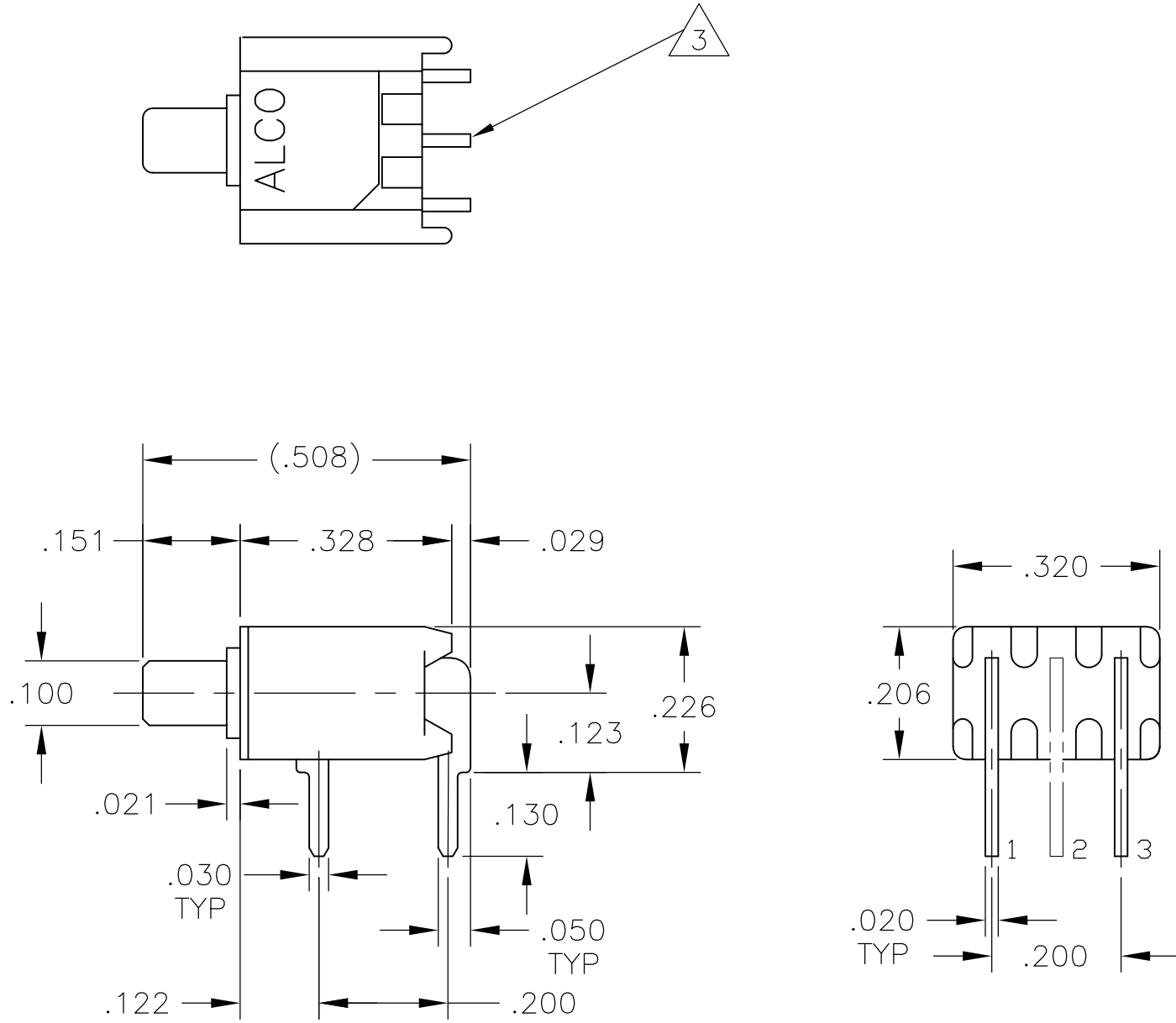
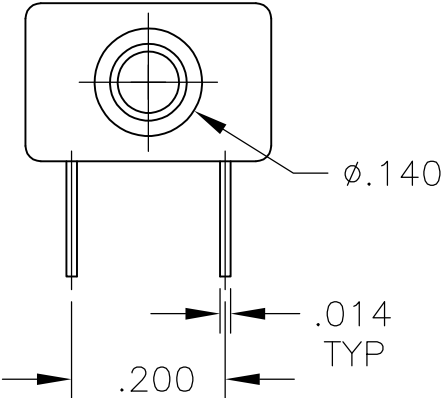
TPA21CCGPC

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

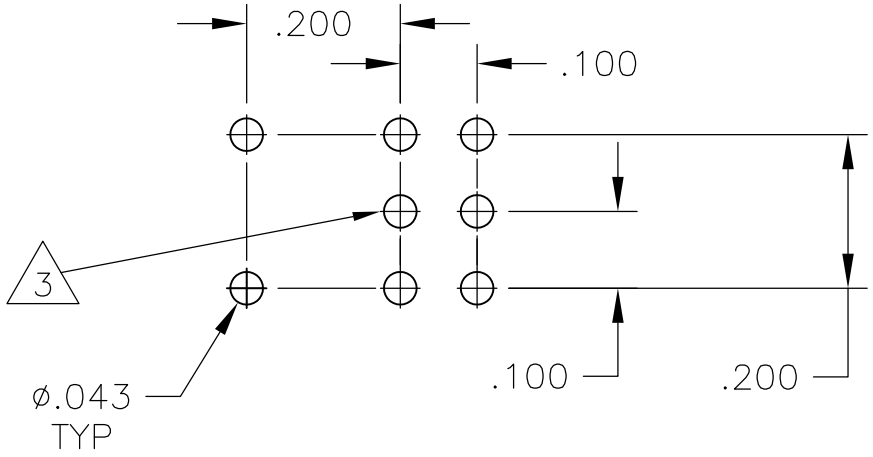
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		P	LTR	DESCRIPTION	DATE	DWN
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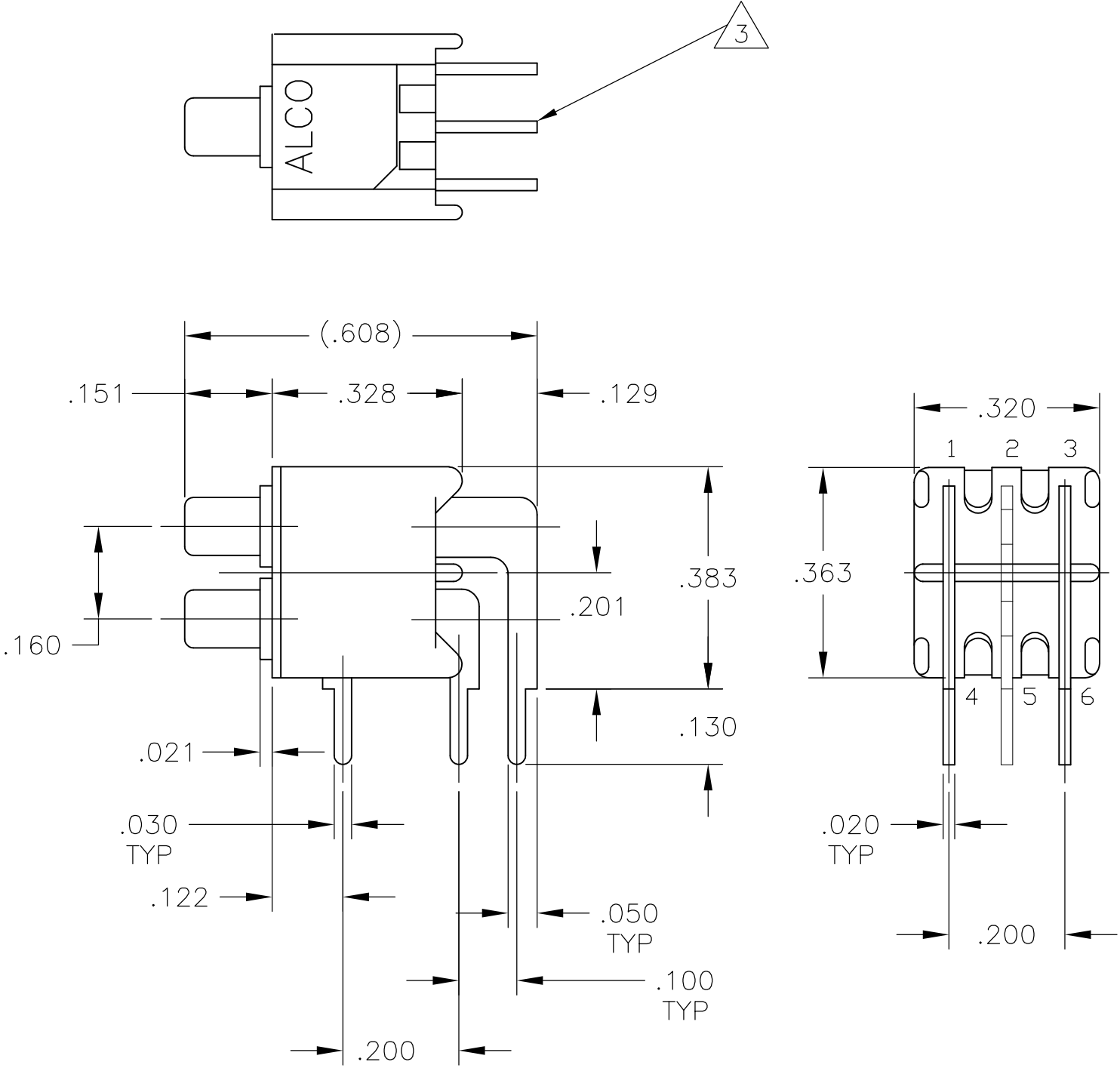
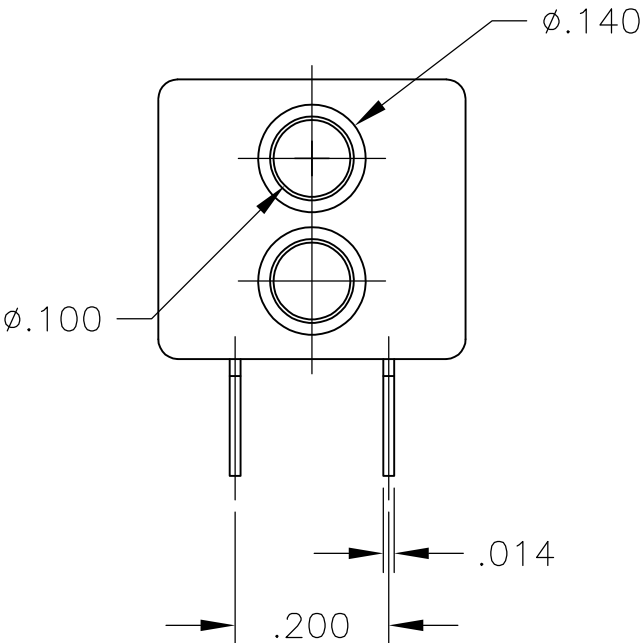
PCB HOLE LAYOUT



TPA11CGRA
TPA11FGRA



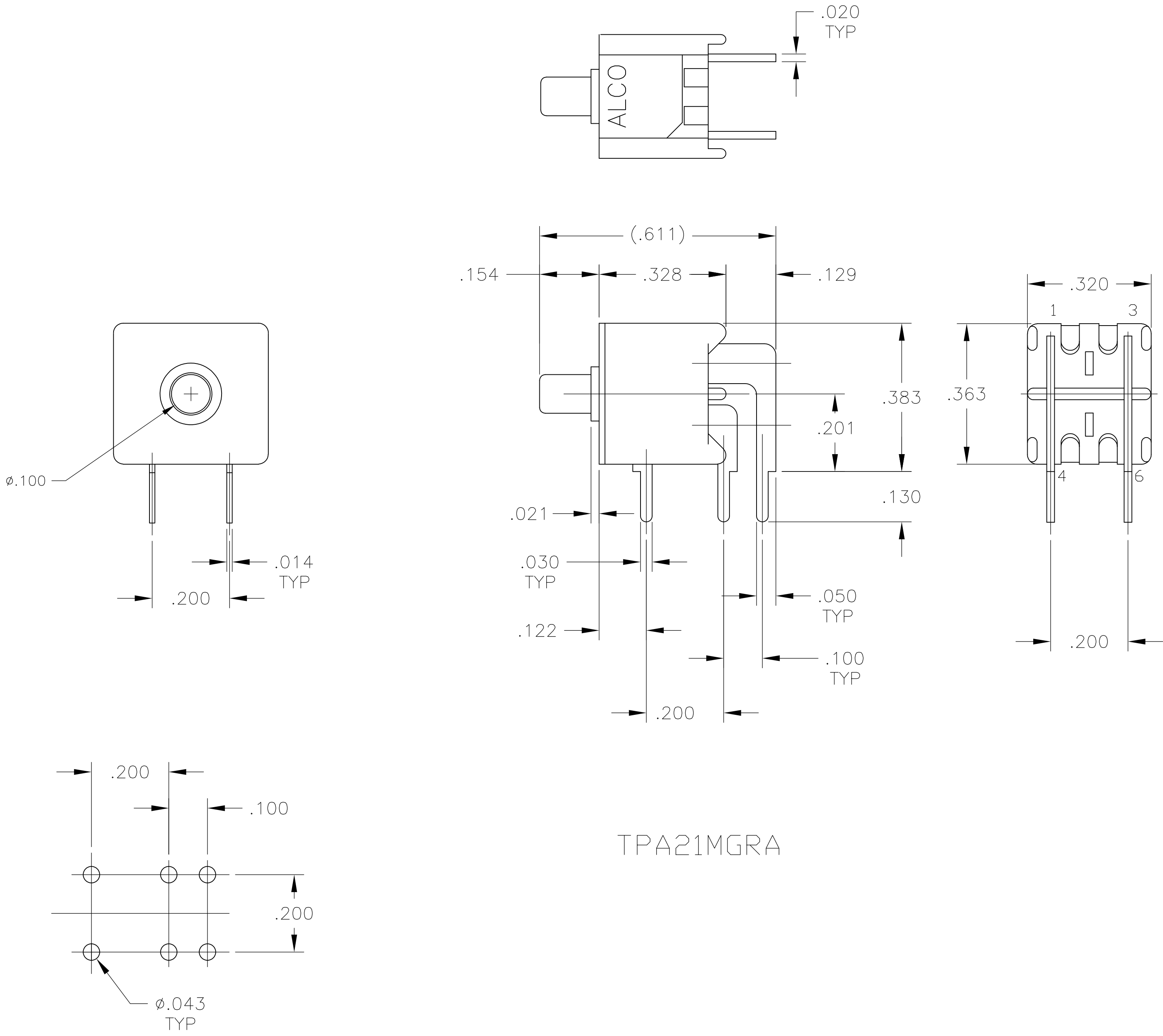
PCB HOLE LAYOUT



TPA21CCGRA
TPA21FFGRA

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN M. BINNER	01SEP05	TE Connectivity	
		CHK M. ZITTO	21JUL05		
DIMENSIONS: INCHES	TOLERANCES UNLESS OTHERWISE SPECIFIED:	AP'D M. ZITTO	21JUL05	NAME PUSHBUTTON SWITCH, TPA 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	—	SIZE A1	RESTRICTED TO —
—		—		SCALE 4:1	SHEET 3 OF 4
CUSTOMER DRAWING		DRAWING NO. 1825096		REV A1	

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



TPA21MGRA

PCB HOLE LAYOUT

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN M. BINNER	01SEP05	TE Connectivity	
		CHK M. ZITTO	21JUL05		
DIMENSIONS: INCHES		AP'D M. ZITTO	21JUL05	NAME	PUSHBUTTON SWITCH, TPA SERIES
		PRODUCT SPEC			—
		APPLICATION SPEC			—
MATERIAL —		WEIGHT —		SIZE A1	CAGE CODE 00779
		FINISH —		DRAWING NO 1825096	RESTRICTED TO —
CUSTOMER DRAWING			SCALE 4:1	SHEET 4	OF 4
				REV A1	