


















MATERIAL		
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, VRA (GOLD)	BRASS	GOLD OVER NICKEL IN CONTACT AREA, TIN OVER NICKEL IN SOLDER AREA
TERMINAL, WIRE LUG (SILVER)	SILVER CLAD COPPER	SILVER OVER NICKEL
TERMINAL, PC (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 (EXTENDED) OR UL94V-2 (FLUSH)	
SUPPORT BRACKET (RA*ES VERSIONS ONLY)	BRASS	TIN OVER COPPER
SUPPORT BRACKET, VRA (B&C BUSHINGS ONLY)	STEEL	TIN OVER COPPER
BUSHING	BRASS	NICKEL OVER COPPER
MOUNTING NUT	BRASS	NICKEL
LOCKWASHER	STEEL	NICKEL
ES HOUSING	NYLON 6/6, NATURAL, UL94 V-2	
ES BOOT	VINYL PLASTISOL, BLACK	

PART NUMBER MATRIX									
MODEL	ACTUATOR	POLES	RATING	FUNCTION	PLATING	TERMINATIONS	PROCESS SEAL	BUTTON COLOR	04
TPC	BLANK=EXTENDED	1	1=GOLD .4VA	C=SPST MOMENTARY	G=GOLD	BLANK=WIRE LUG	ES=PROCESS SEALED <sup>2</sup>	0=BLACK	
		2	3=SILVER 1 AMP <sup>1</sup>	F=SPDT MOMENTARY	BLANK=SILVER <sup>1</sup>	PC=PRINTED CIRCUIT		2=RED	
				M=DPST MOMENTARY		RA=RIGHT ANGLE <sup>2</sup>		6=BLUE	
				R=DPDT MOMENTARY		VRA=VERTICAL RIGHT ANGLE <sup>3</sup>			

NOTES:  
 1. SILVER ONLY AVAILABLE IN WIRE LUG AND PC TERMINATIONS  
 2. RAES AVAILABLE WITH B AND C BUSHINGS ONLY  
 3. VRA ONLY AVAILABLE IN SINGLE POLE

SPECIFICATIONS	
RATING	GOLD: .4VA MAX. @ 20VDC OR PEAK AC RESISTIVE SILVER: 1A @ 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

- TERMINAL NUMBERS ARE FOR REFERENCE ONLY AND DO NOT APPEAR ON SWITCHES.
- ALL MATERIALS AND FINISHES COMPLY WITH EU DIRECTIVE 2002/95/EC OF 27JAN2003 (ROHS).
- DISPOSABLE BOOT SUPPLIED WITH ES VERSIONS. BOOT TO BE PLACED OVER BUSHING BEFORE SOLDER WASHING.
-  CENTER TERMINAL PRESENT ON DOUBLE THROW SWITCHES ONLY.
-  OBSOLETE.

TE P/N	ALCO P/N	POLES	THROWS	PLATING	TERMINALS	PROCESS SEALED	BUTTON COLOR	FUNCTION				CONNECTED TERMINALS	
								OFF	MOM	ON	OFF	1-2	2-3
1825100-1	TPF11CGPC004	1	1	GOLD	PC	NO	BLACK	OFF	MOM	OFF	OFF	1-3	
 1825100-2	TPF11CGPC204	1	1	GOLD	PC	NO	RED	OFF	MOM	OFF	OFF	1-3	
 1825100-3	TPF11CGPCES004	1	1	GOLD	PC	YES	BLACK	OFF	MOM	OFF	OFF	1-3	
1825100-4	TPF11CGRA004	1	1	GOLD	RIGHT ANGLE	NO	BLACK	OFF	MOM	OFF	OFF	1-3	
 1825100-5	TPF11CGRA204	1	1	GOLD	RIGHT ANGLE	NO	RED	OFF	MOM	OFF	OFF	1-3	
 1825100-6	TPF11CGRA604	1	1	GOLD	RIGHT ANGLE	NO	BLUE	OFF	MOM	OFF	OFF	1-3	
1825100-7	TPF11FGPC004	1	2	GOLD	PC	NO	BLACK	ON	MOM	OFF	1-2	2-3	
 1825100-8	TPF11FGPC204	1	2	GOLD	PC	NO	RED	ON	MOM	OFF	1-2	2-3	
 1825100-9	TPF11FGPC604	1	2	GOLD	PC	NO	BLUE	ON	MOM	OFF	1-2	2-3	
 1-1825100-0	TPF11FGPCES004	1	2	GOLD	PC	YES	BLACK	ON	MOM	OFF	1-2	2-3	
 1-1825100-1	TPF11FGRA004	1	2	GOLD	RIGHT ANGLE	NO	BLACK	ON	MOM	OFF	1-2	2-3	
 1-1825100-2	TPF13C004	1	1	SILVER	WIRE LUG	NO	BLACK	OFF	MOM	OFF	1-3		
 1-1825100-3	TPF13C204	1	1	SILVER	WIRE LUG	NO	RED	OFF	MOM	OFF	1-3		
 1-1825100-4	TPF13F204	1	2	SILVER	WIRE LUG	NO	RED	ON	MOM	OFF	1-2	2-3	
 1-1825100-5	TPF13F604	1	2	SILVER	WIRE LUG	NO	BLUE	ON	MOM	OFF	1-2	2-3	
 1-1825100-6	TPF21MGPC004	2	1	GOLD	PC	NO	BLACK	OFF	MOM	OFF	1-3, 4-6		
 1-1825100-7	TPF21RGRA004	2	2	GOLD	RIGHT ANGLE	NO	BLACK	ON	MOM	OFF	1-2, 4-5	2-3, 5-6	
 1-1825100-8	TPF23M004	2	1	SILVER	WIRE LUG	NO	BLACK	OFF	MOM	OFF	1-3, 4-6		

THIS DRAWING IS A CONTROLLED DOCUMENT. BIN RAGHU 12-7-05

DIMENSIONS: INCHES	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD	NAME
0 PLC ± .010	1 PLC ± .010	2 PLC ± .010	3 PLC ± .010
4 PLC ± .010	ANGLES ± .5°	WEIGHT	RESTRICTED TO

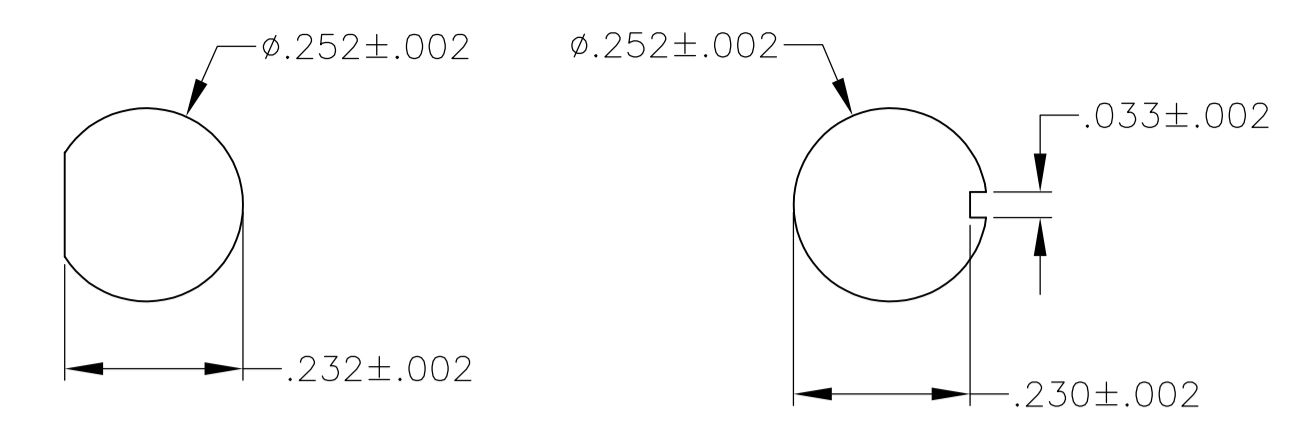
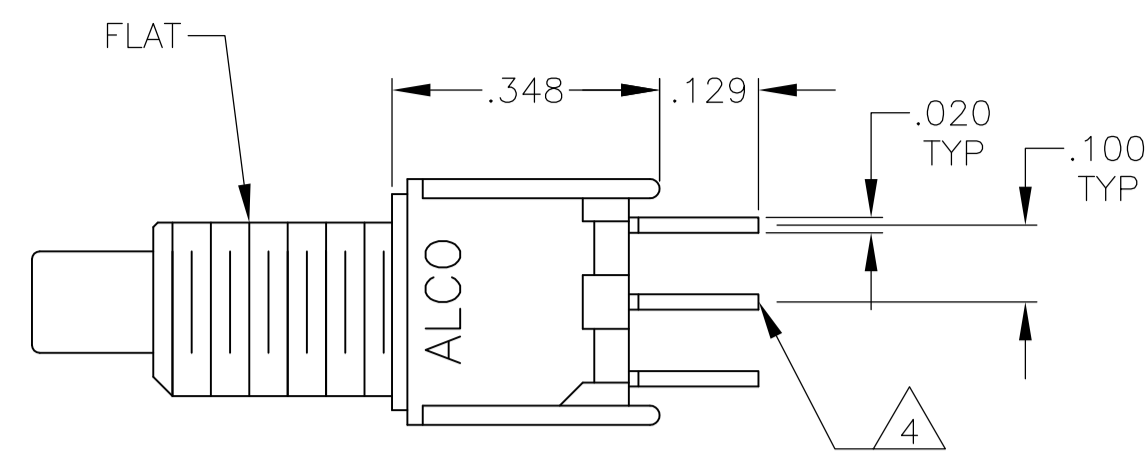
MATERIAL: - FINISH: -

PRODUCT SPEC: PUSHBUTTON SWITCH, TPF SERIES

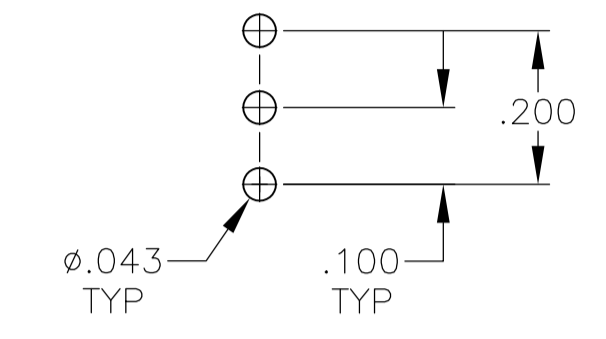
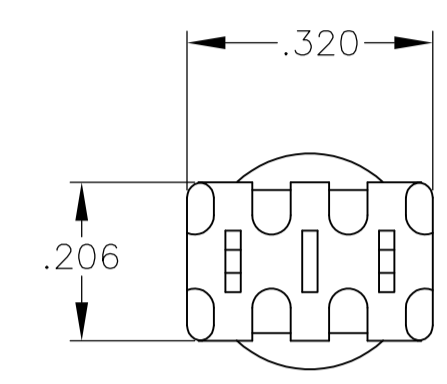
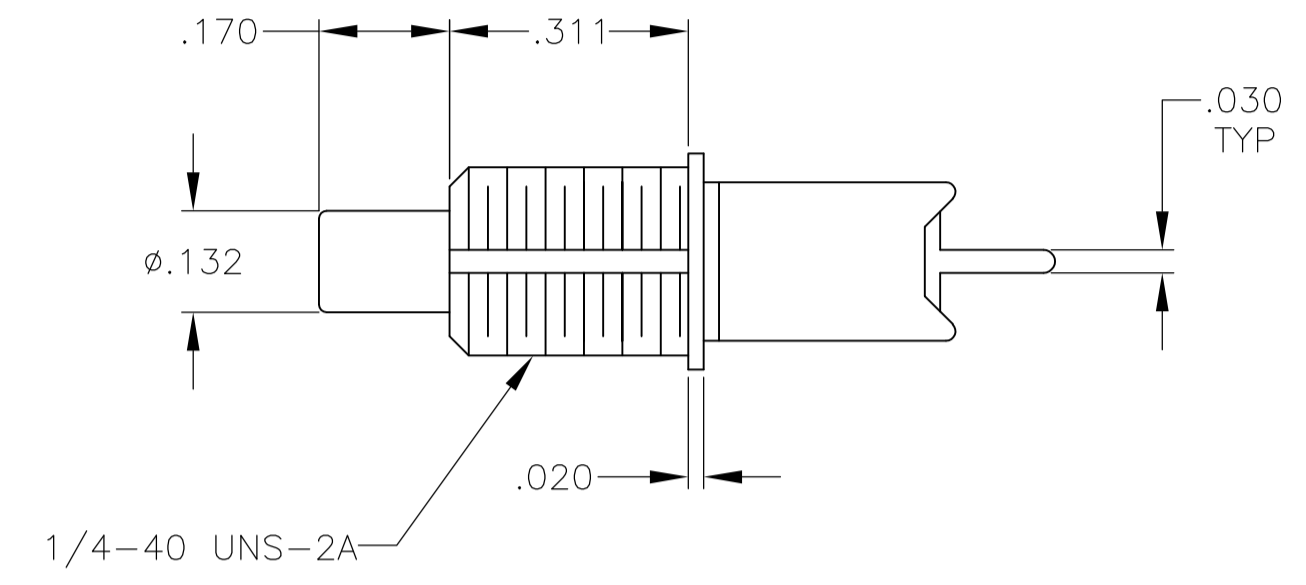
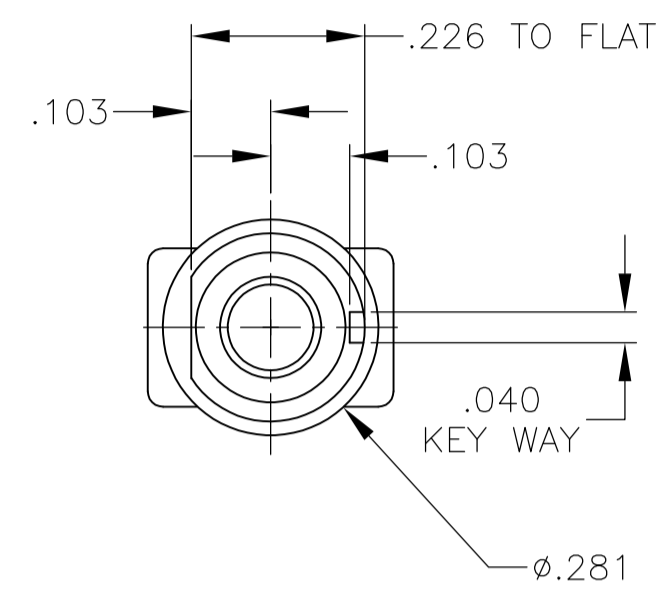
APPLICATION SPEC: -

SIZE: A1 CASE CODE: 00779 DRAWING NO: 1825100

SCALE: 4:1 SHEET 1 OF 5 REV B

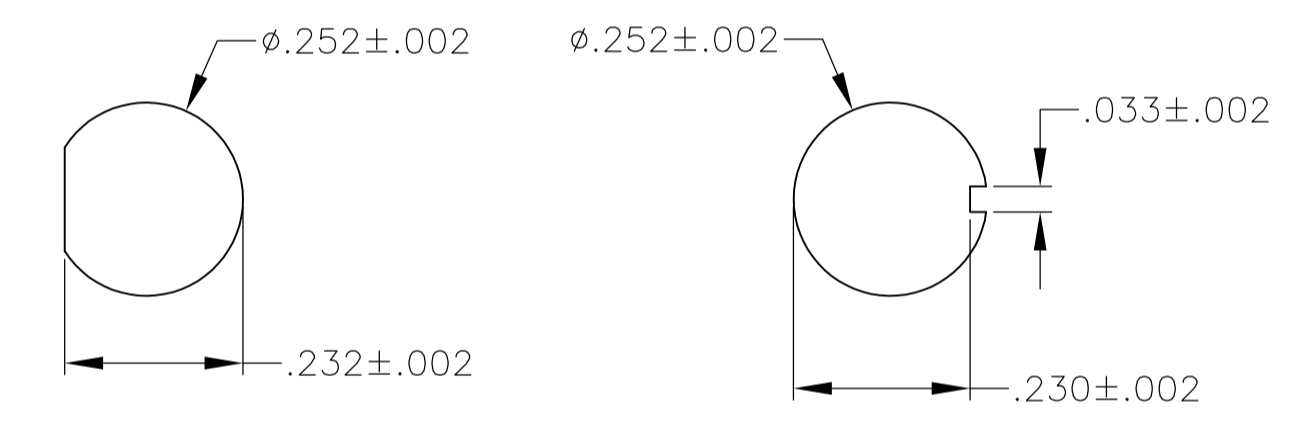
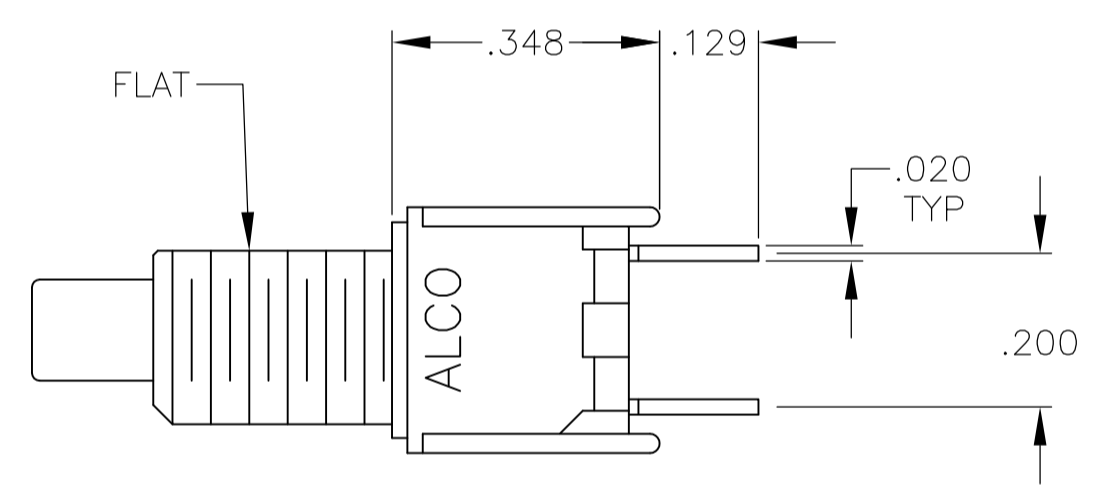


RECOMMENDED PANEL LAYOUTS

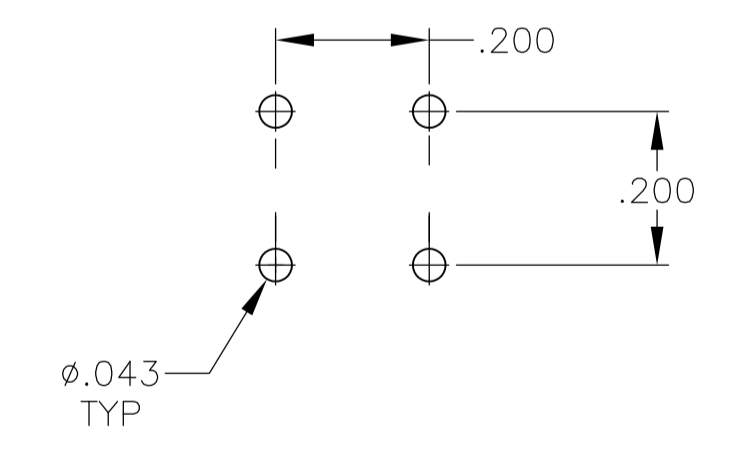
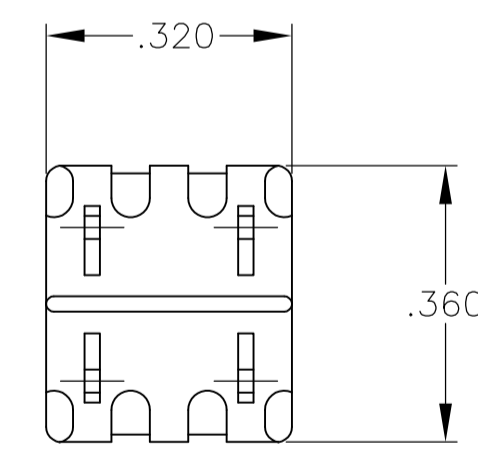
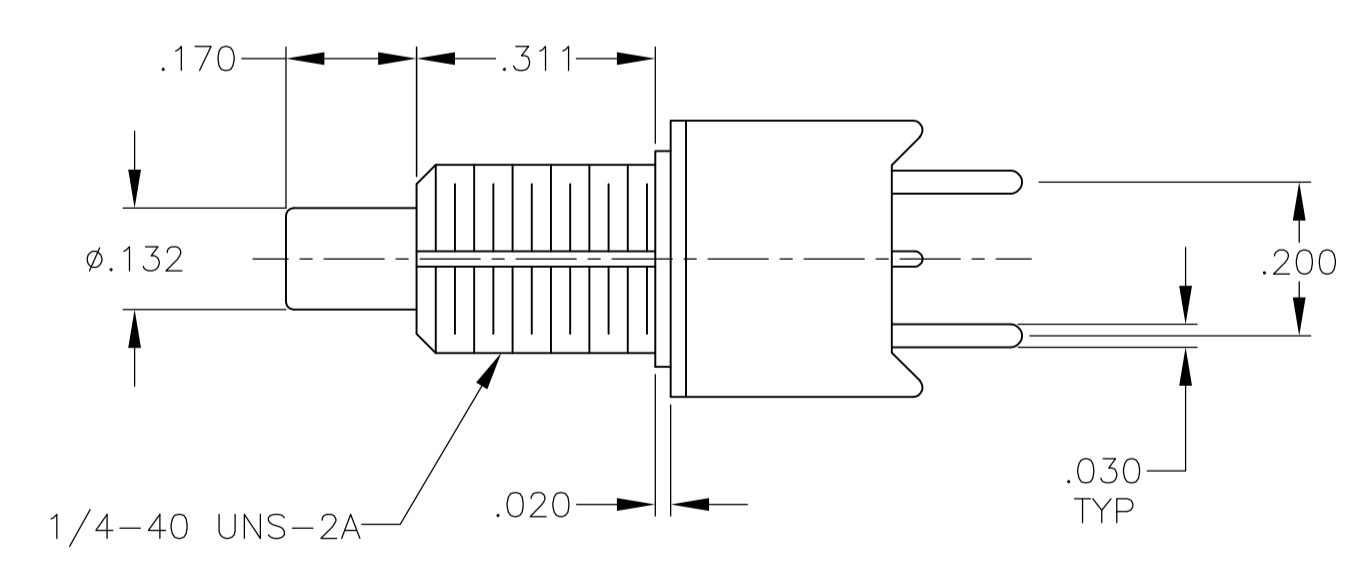
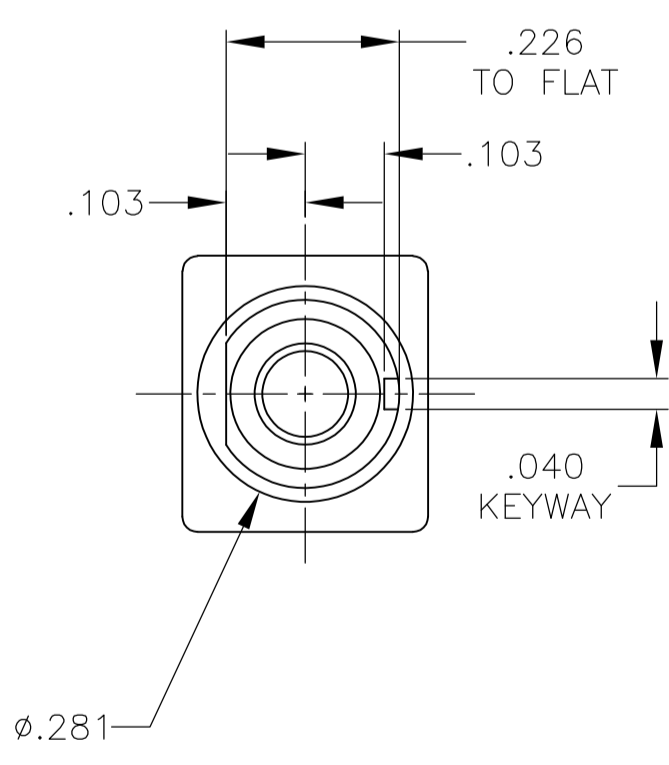


RECOMMENDED PCB LAYOUT  
TOLERANCES +/- .002

TPF11CGPC, TPF11FGPC



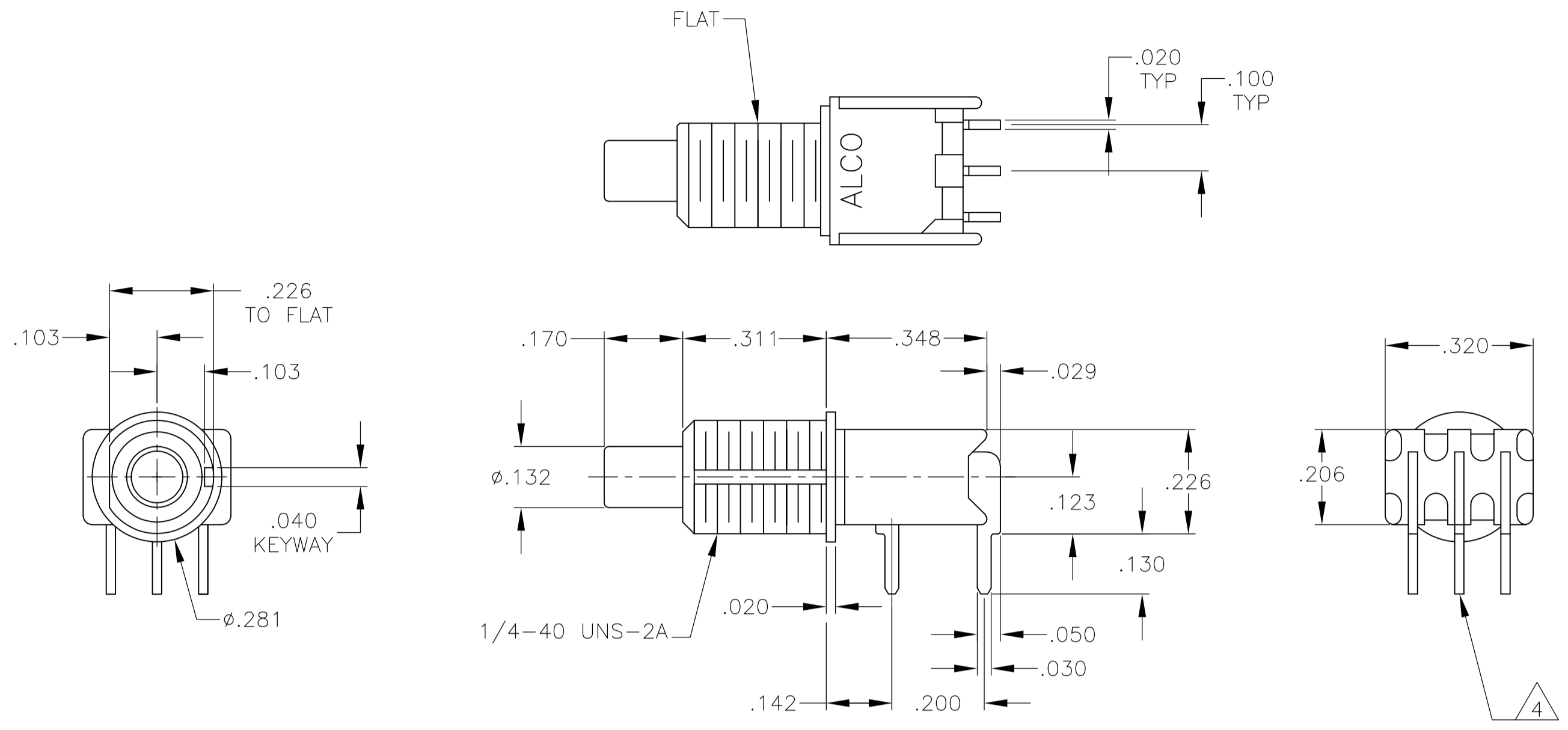
RECOMMENDED PANEL LAYOUTS



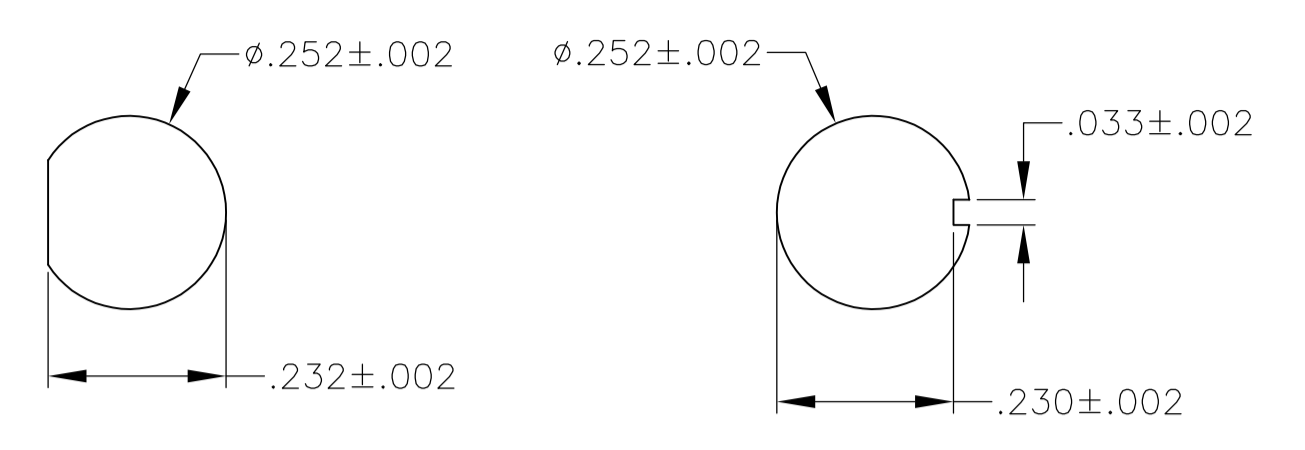
RECOMMENDED PCB LAYOUT  
TOLERANCES +/- .002

TPF21RGPC

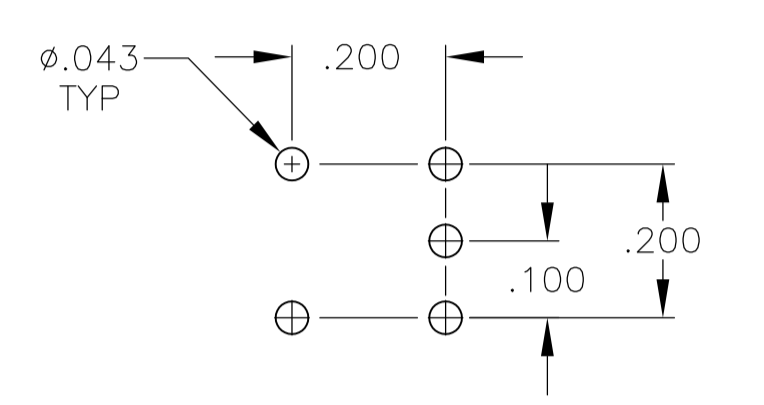
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0. PLC ± .010		APPLICATION SPEC		SIZE	
1. PLC ± .005		RESTRICTED TO		CAGE CODE	
2. PLC ± .005		DRAWING NO		DRAWING NO	
3. PLC ± .010		WEIGHT		A1 00779	
4. PLC ± .010		CUSTOMER DRAWING		SCALE 4:1	
ANGLES ± .5°		SHEET 2 OF 5		REV B	



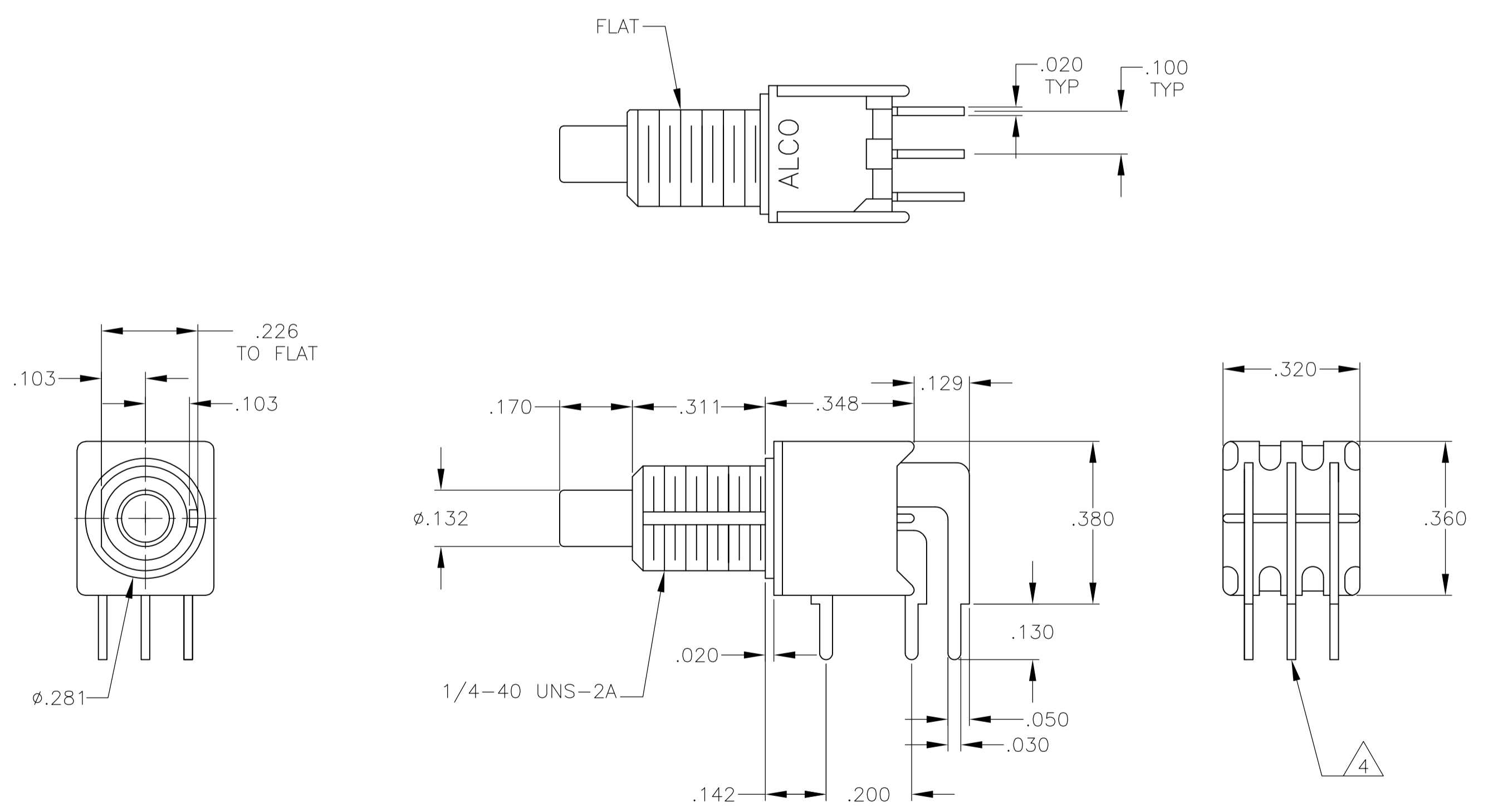
TPF11CGRA, TPF11FGRA



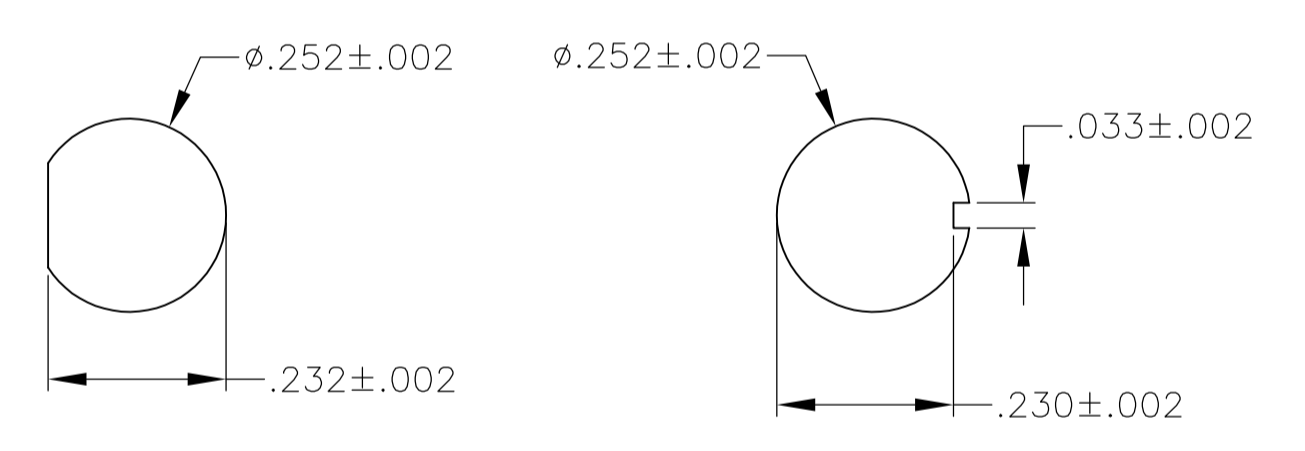
RECOMMENDED PANEL LAYOUTS



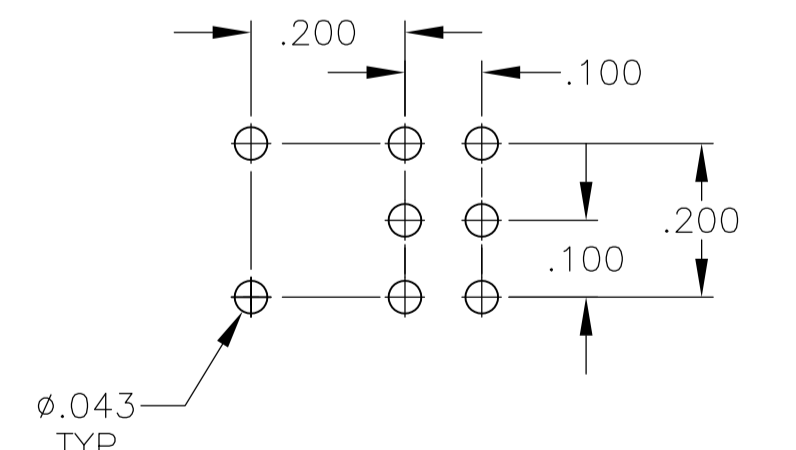
RECOMMENDED PCB LAYOUT  
TOLERANCES +/- .002



TPF21RGRA



RECOMMENDED PANEL LAYOUTS

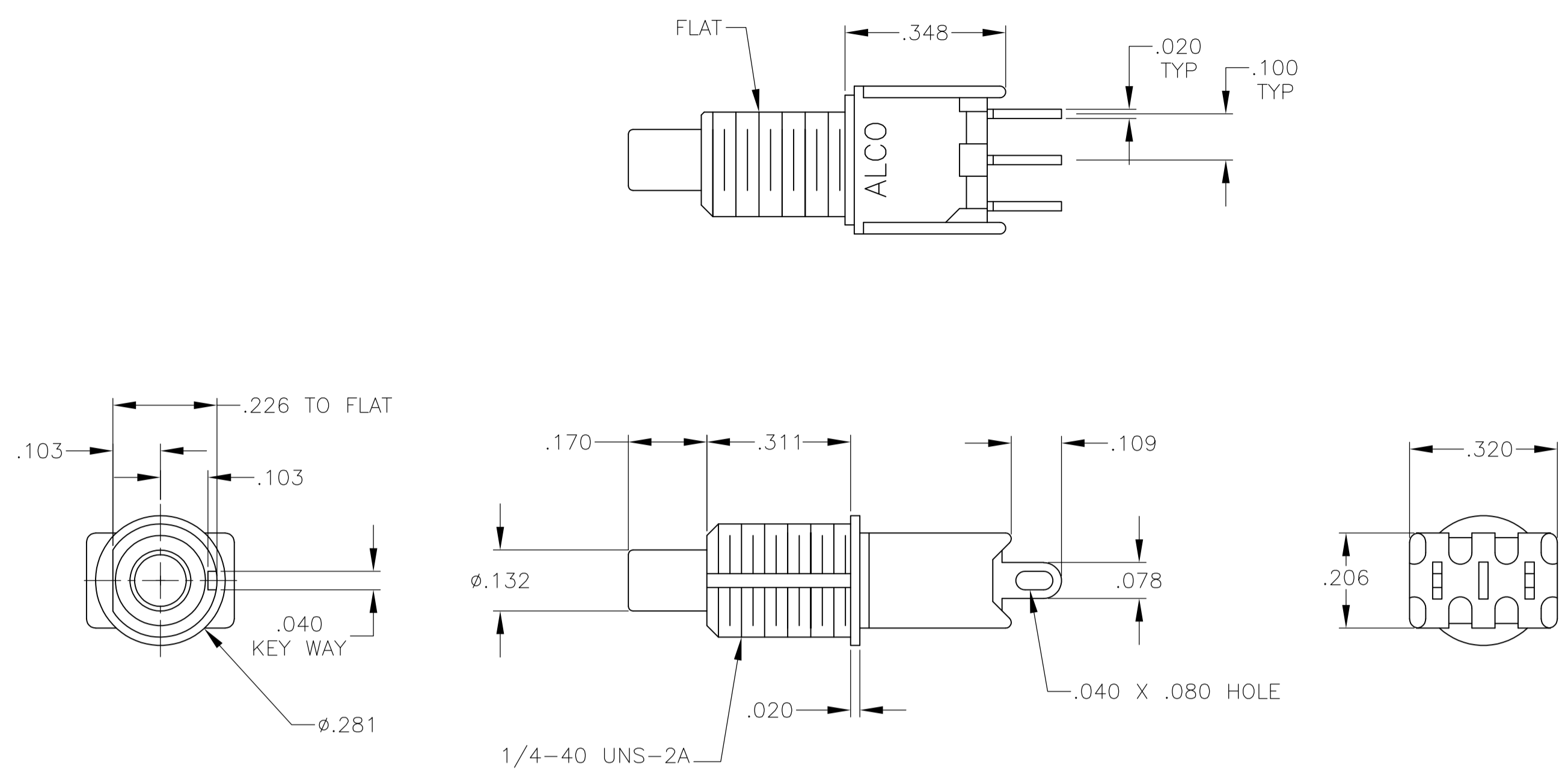


RECOMMENDED PCB LAYOUT  
TOLERANCES +/- .002

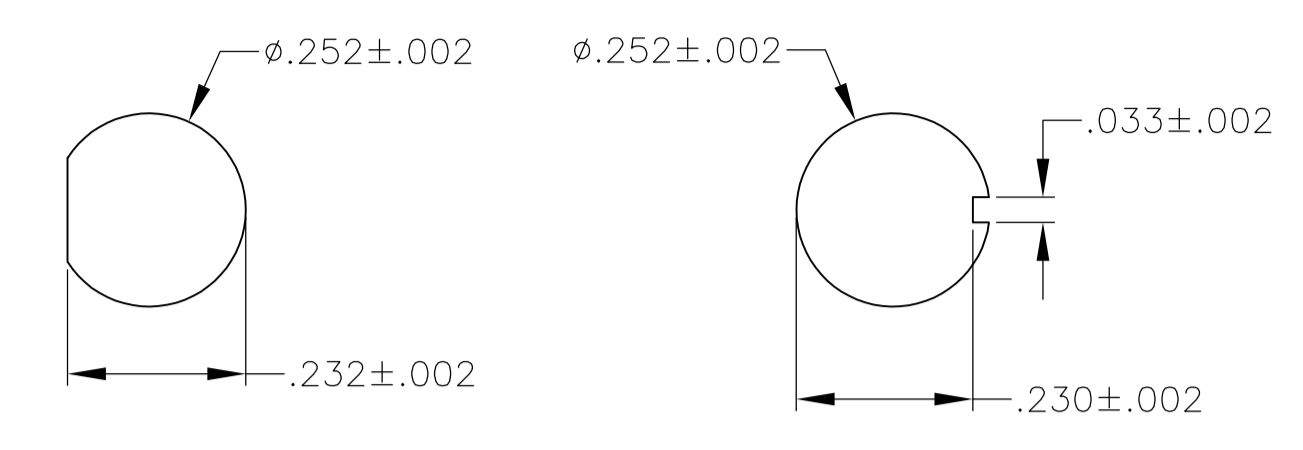
THIS DRAWING IS A CONTROLLED DOCUMENT.		BIN RAGHU 12-7-05		CHK -		APVD -		NAME	
DIMENSIONS: INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED:		PRODUCT SPEC		APPLICATION SPEC		RESTRICTED TO	
<ul style="list-style-type: none"> <li>0. PLC ± -</li> <li>1. PLC ± -</li> <li>2. PLC ± -</li> <li>3. PLC ± .010</li> <li>4. PLC ANGLES ± ± °</li> </ul>		<ul style="list-style-type: none"> <li>0.001</li> <li>0.002</li> <li>0.005</li> <li>0.010</li> <li>0.020</li> <li>0.050</li> <li>0.100</li> <li>0.150</li> <li>0.250</li> <li>0.500</li> <li>1.000</li> <li>2.000</li> <li>5.000</li> <li>10.000</li> <li>20.000</li> <li>50.000</li> <li>100.000</li> <li>250.000</li> <li>500.000</li> <li>1000.000</li> </ul>		SIZE: A1 CAGE CODE: 00779 DRAWING NO: 1825100		WEIGHT: - CUSTOMER DRAWING		SCALE: 4:1 SHEET: 3 OF 5 REV: B	



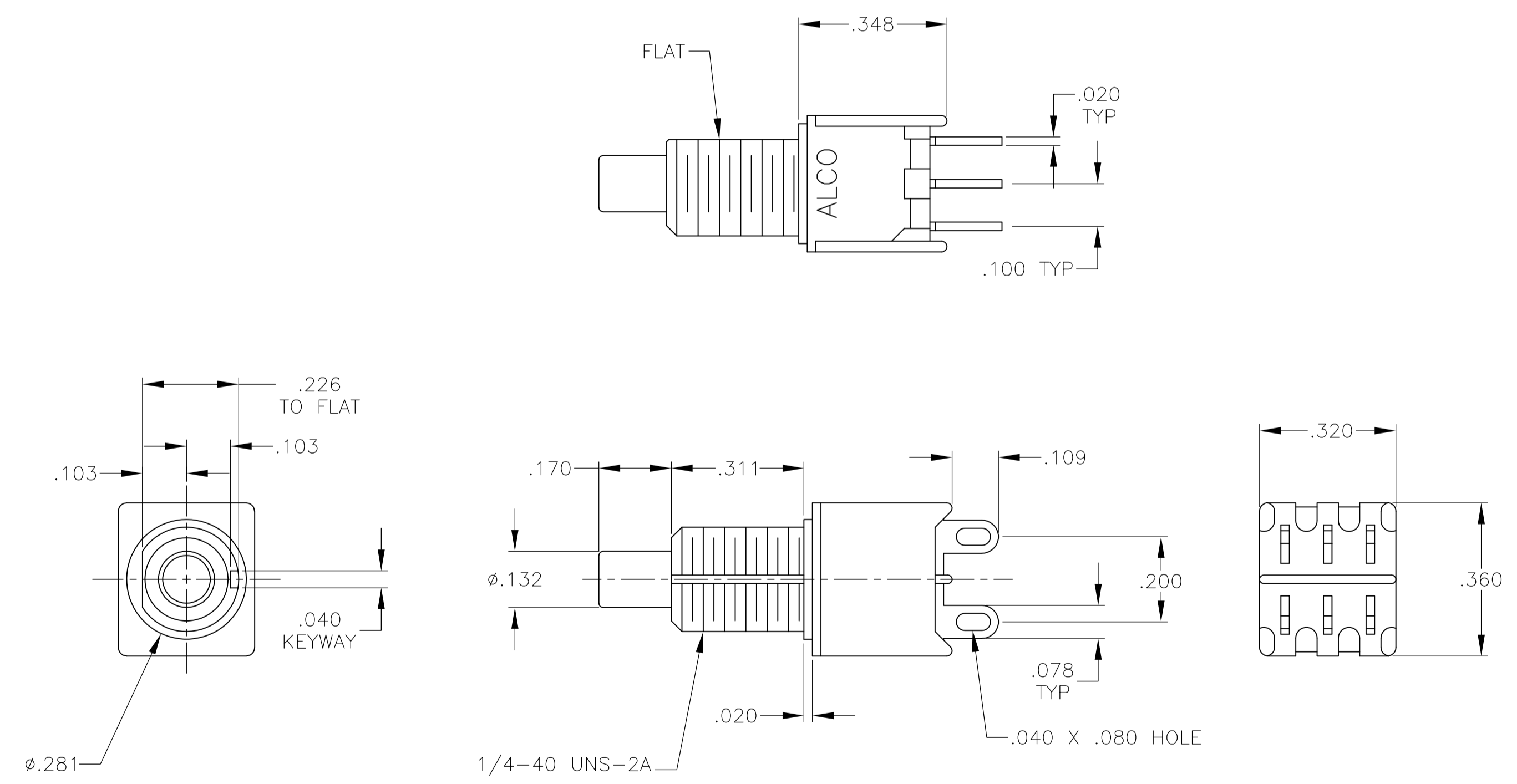
PUSHBUTTON SWITCH, TPF SERIES



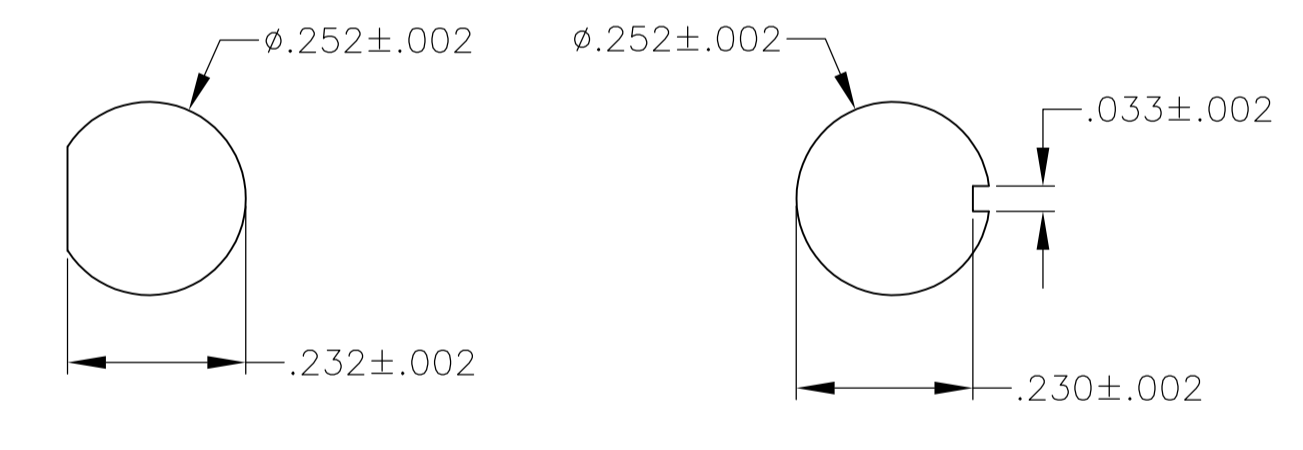
TPF13C, TPF13F



RECOMMENDED PANEL LAYOUTS

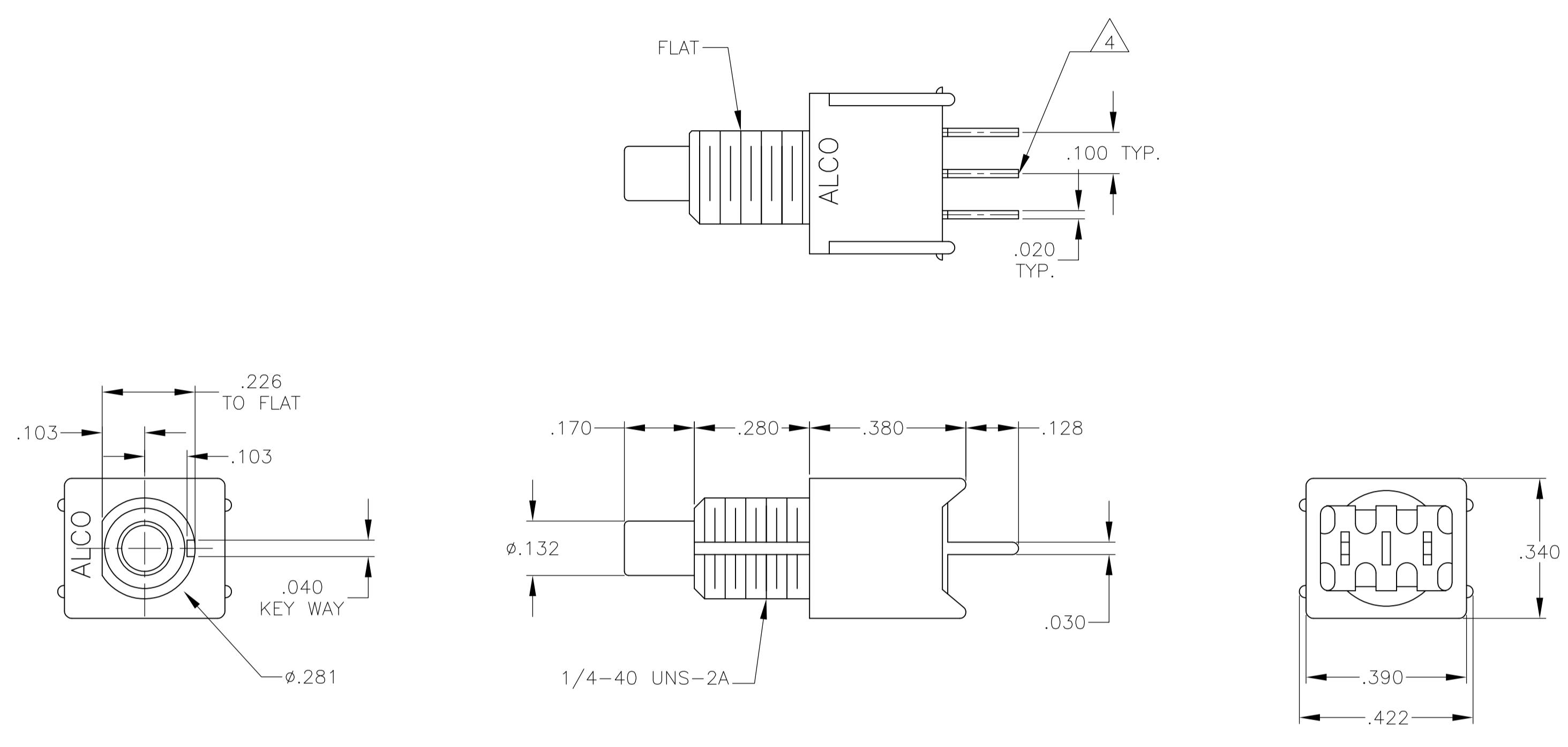


TPF23M



RECOMMENDED PANEL LAYOUTS

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWG	RAGHU	12-7-05	TE Connectivity	
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TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD			PRODUCT SPEC	
0. PLC	± .005				APPLICATION SPEC	
1. PLC	± .002				RESTRICTED TO	
2. PLC	± .001				SIZE	
3. PLC	± .010				CAGE CODE	
4. PLC	± .010				DRAWING NO	
ANGLES	± .5°				WEIGHT	
MATERIAL					A1 00779	
					C=1825100	
					CUSTOMER DRAWING	
					SCALE 4:1 SHEET 4 OF 5 REV B	



TPF11CGPCES, TPF11FGPCES

RECOMMENDED PANEL LAYOUTS

RECOMMENDED PCB LAYOUT  
TOLERANCES +/- .002

THIS DRAWING IS A CONTROLLED DOCUMENT.		DIN	12-7-05	<b>STE</b> TE Connectivity	
		CHK	RAGHU		
DIMENSIONS: INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME	
INCHES		0 PLG ± -		PRODUCT SPEC	
		1 PLG ± -		APPLICATION SPEC	
		2 PLG ± -		SIZE	
		3 PLG ± .010		CAGE CODE	
		4 PLG ± -		DRAWING NO	
		ANGLES ± °		RESTRICTED TO	
MATERIAL		FINISH		WEIGHT	
				A1 00779 C=1825100	
		CUSTOMER DRAWING		SCALE 4:1 SHEET 5 OF 5 REV B	