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LOCAD

DIST00

REVISONS

F	LTR	DESCRIPTION	DATE	DWN	APVD
	A	REVISED PER ECO-05-004376	12-7-05	HMR	-

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 2	0=BLACK	
		2	3=SILVER 1 AMP1	F=SPDT MOMENTARY	BLANK=SILVER*	PC=PRINTED CIRCUIT		2=RED	
				M=DPST MOMENTARY		RA=RIGHT ANGLE 2		6=BLUE	
				R=DPDT MOMENTARY		VRA=VERTICAL RIGHT ANGLE 3			
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

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. DISPOSABLE BOOT SUPPLIED WITH ES VERSIONS. BOOT TO BE PLACED OVER BUSHING BEFORE SOLDER WASHING

4. CENTER TERMINAL PRESENT ON DOUBLE THROW SWITCHES ONLY.

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

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DWN RAGHU

CHK -

APVD -

NAME

tyco Electronics

Tyco Electronics Corporation

Harrisburg, Pa 17105-3608

PRODUCT SPEC

APPLICATION SPEC

SIZE

CAGE CODE

DRAWING NO

RESTRICTED TO

WEIGHT

SCALE

4:1

SHEET

1 OF 5

REV

A

DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ± -

1 PLC ± -

2 PLC ± -

3 PLC ± .010

4 PLC ± -

ANGLES ± °

MATERIAL -

FINISH -

CUSTOMER DRAWING

1825100

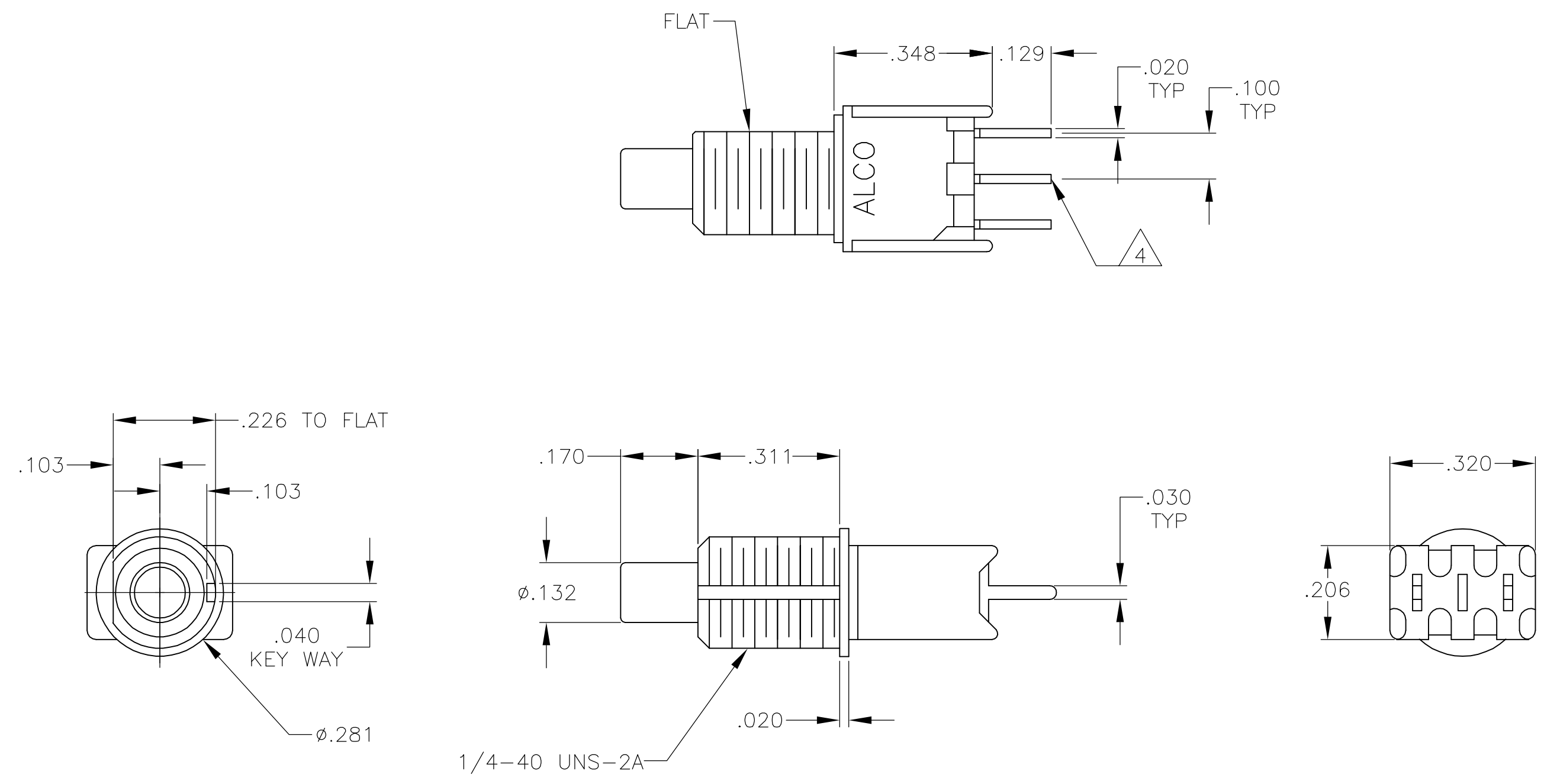
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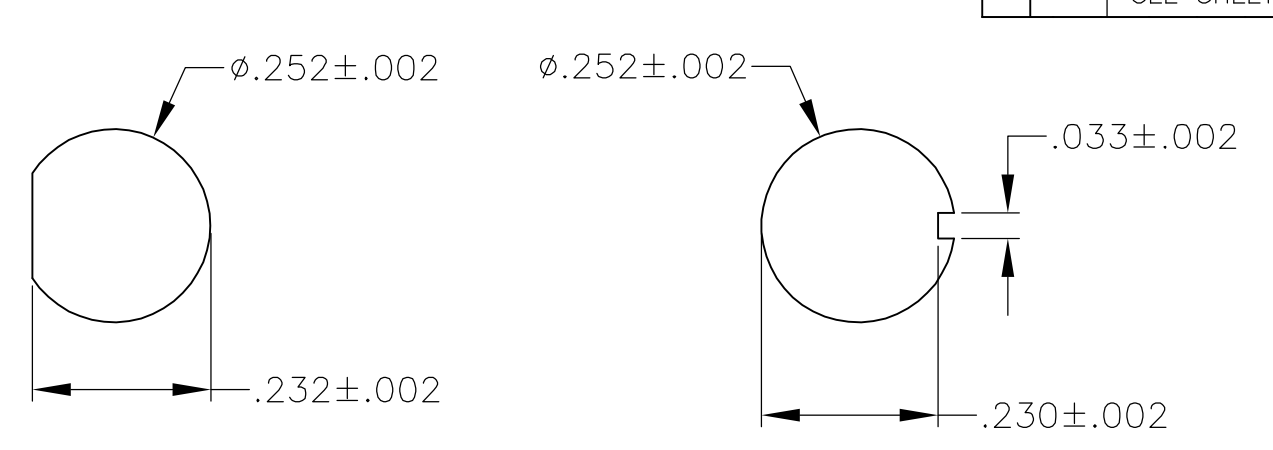
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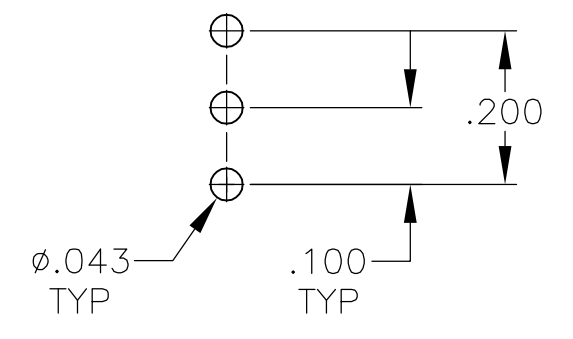
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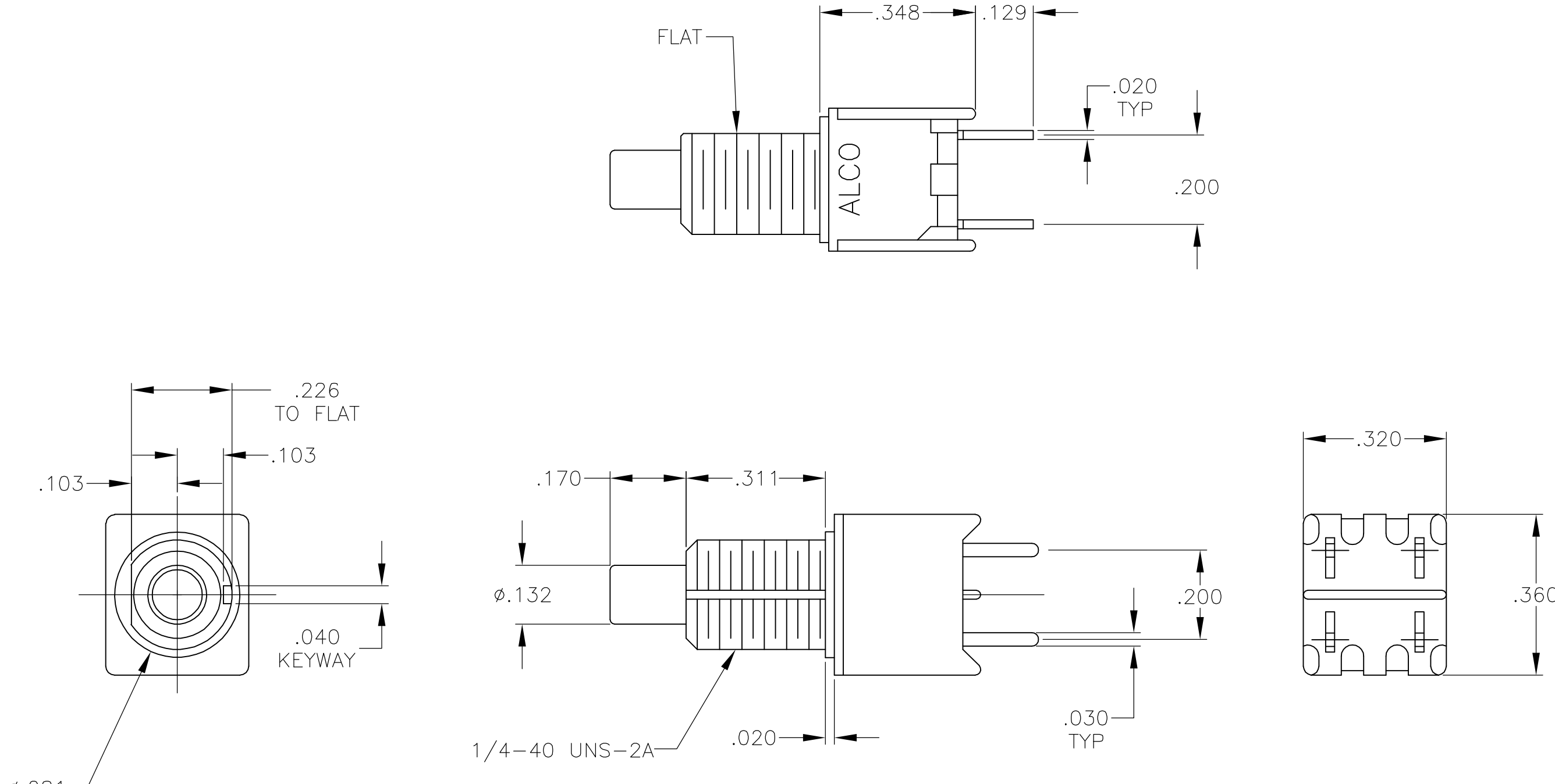
TPF11CGPC, TPF11FGPC



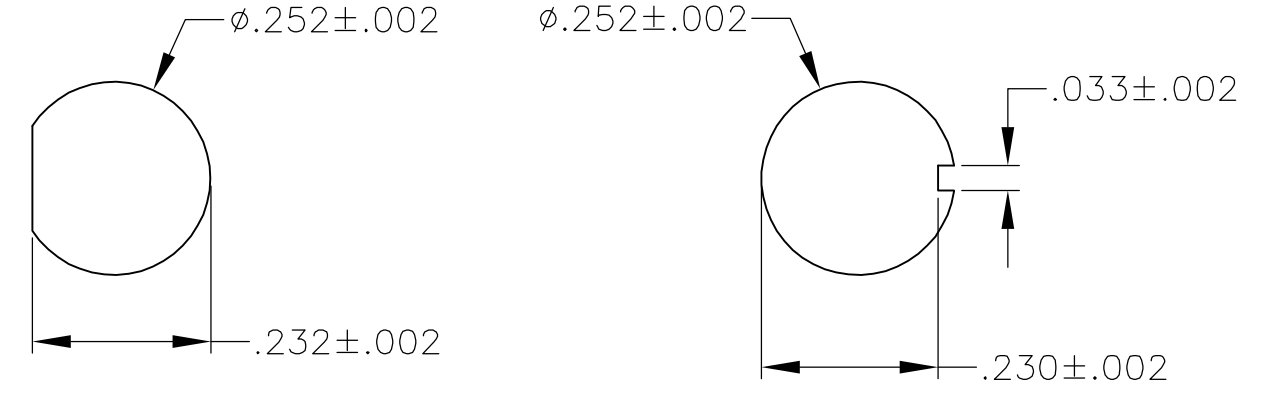
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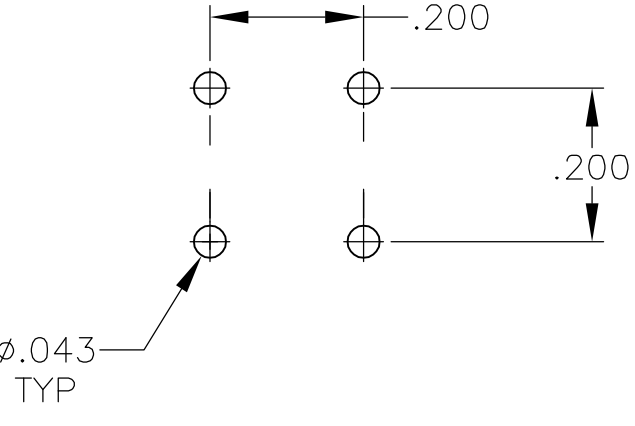
RECOMMENDED PCB LAYOUT
TOLERANCES +/- .002



TPF21RGPC



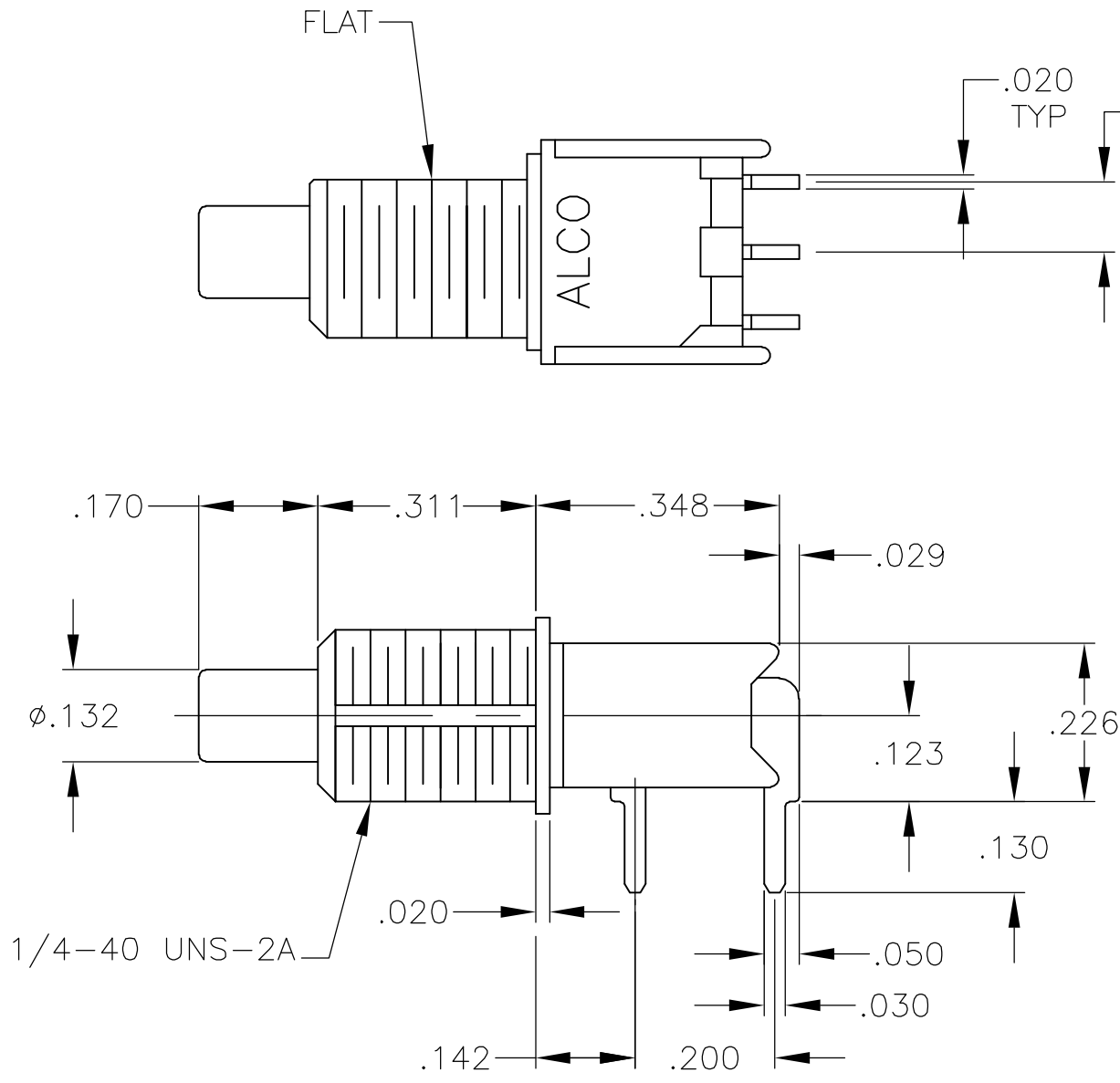
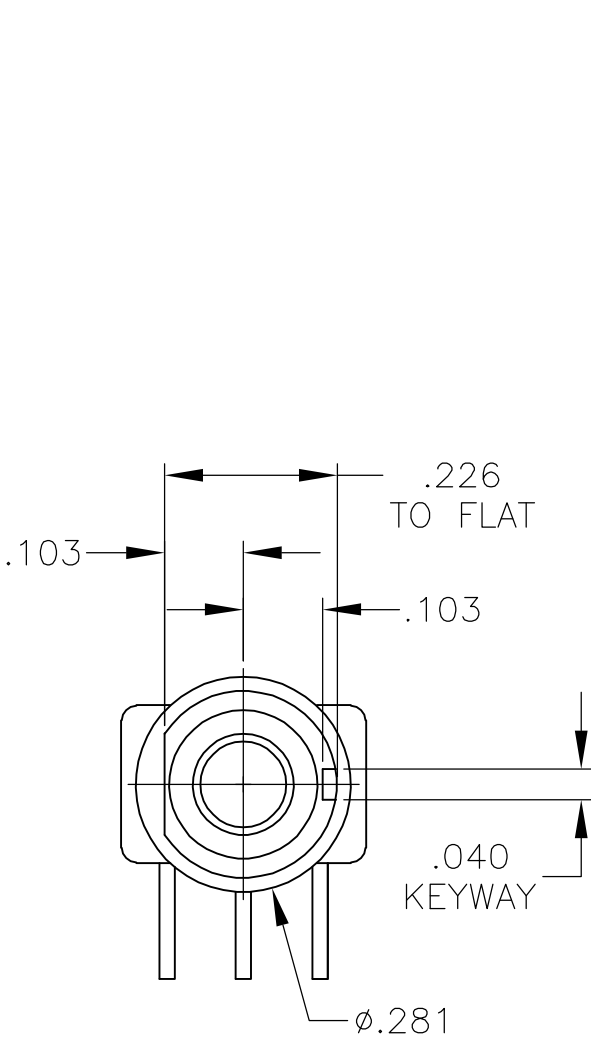
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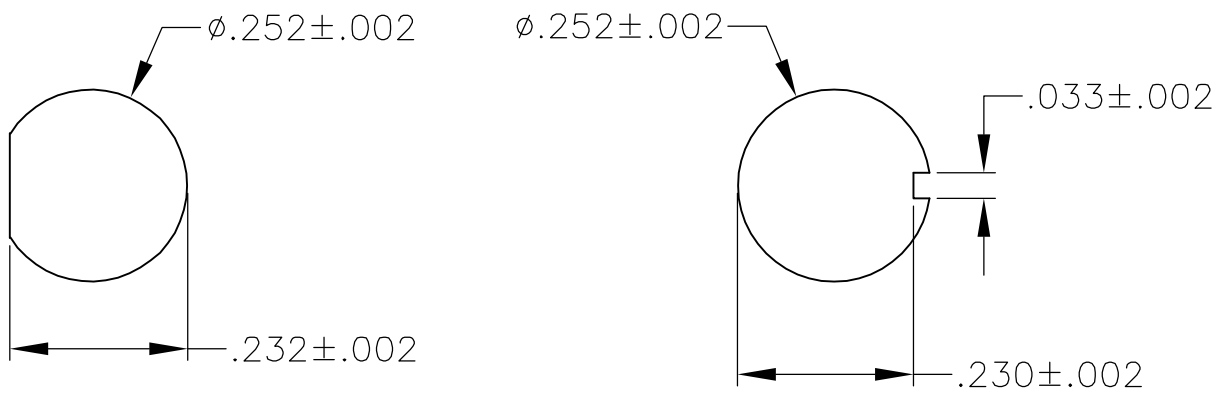
RECOMMENDED PCB LAYOUT
TOLERANCES +/- .002

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN RAGHU	12-7-05	Tyco Electronics Corporation Harriaburg, Pa 17105-3608	
DIMENSIONS: INCHES		CHK —	—	NAME —	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD —	—	PRODUCT SPEC —	
0 PLC ± .010 1 PLC ± .010 2 PLC ± .010 3 PLC ± .010 4 PLC ± .010 ANGLES ± .5°		APPLICATION SPEC —		SIZE —	
MATERIAL —		WEIGHT —		RESTRICTED TO —	
CUSTOMER DRAWING		SCALE 4:1		SHEET 2 OF 5	
REV A		REV A		REV A	

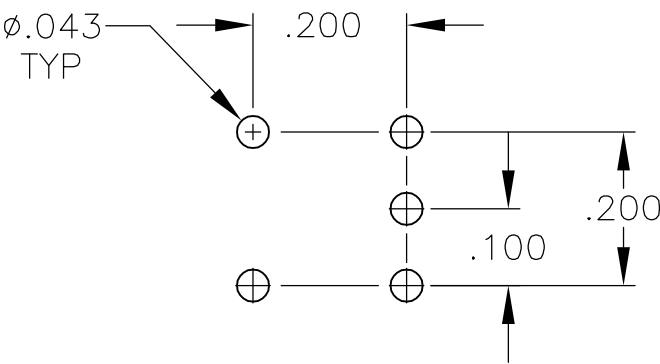
LOC		DIST		REVISIONS			
AD	00	P	LTR	DESCRIPTION		DATE	DWN
		—	—	SEE SHEET 1		—	—



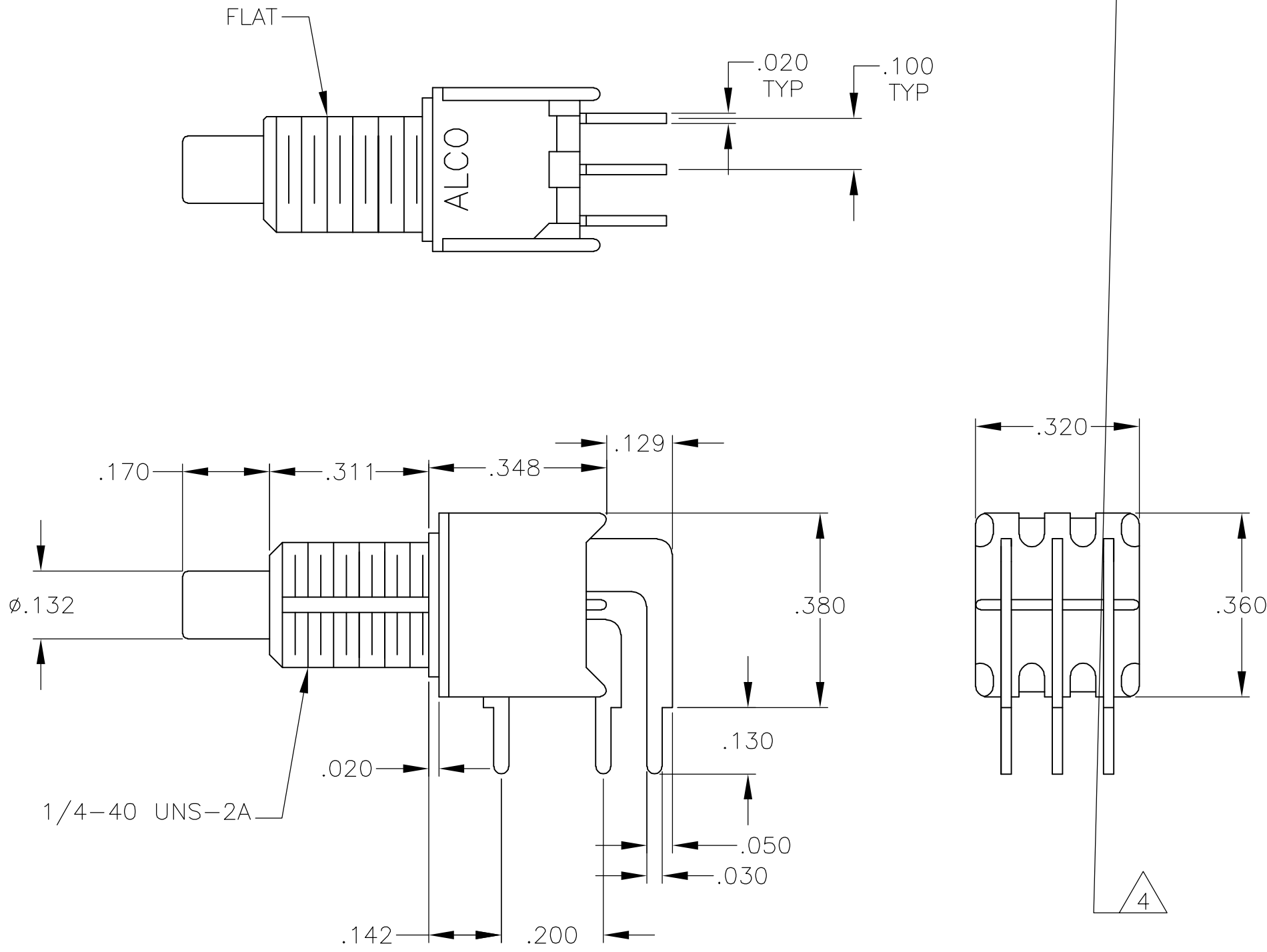
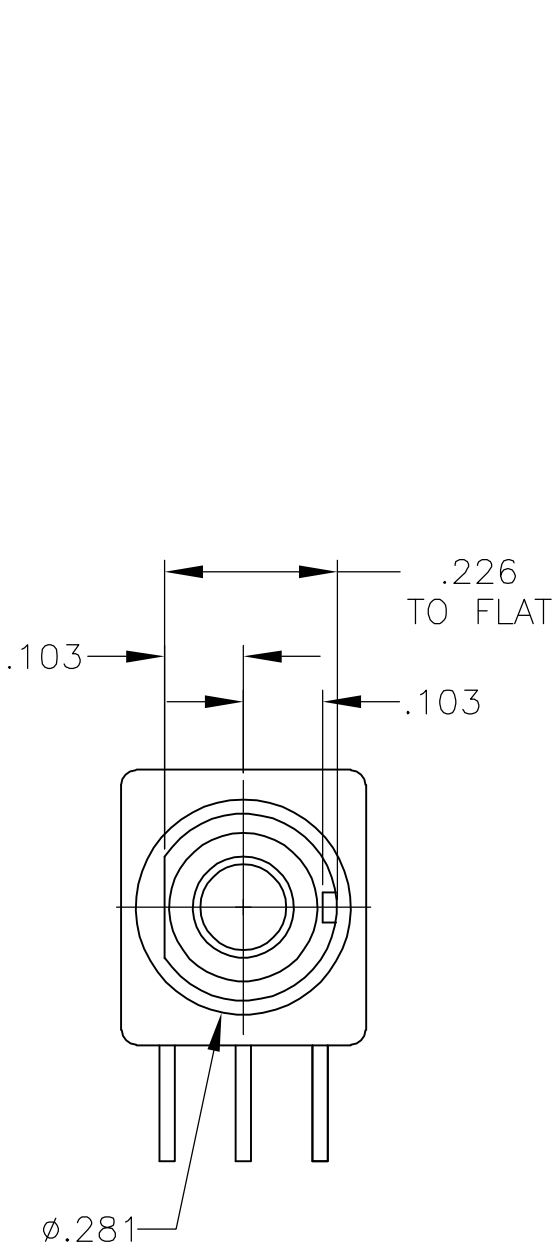
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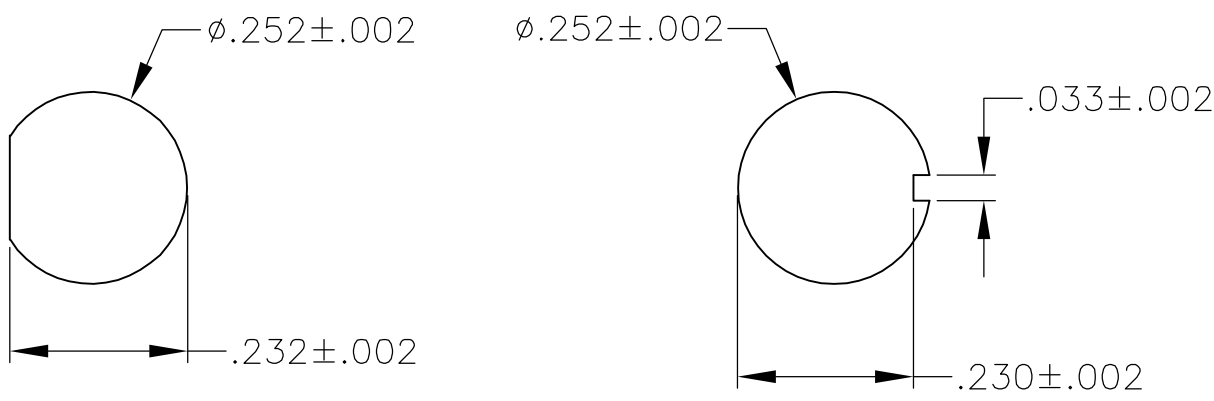
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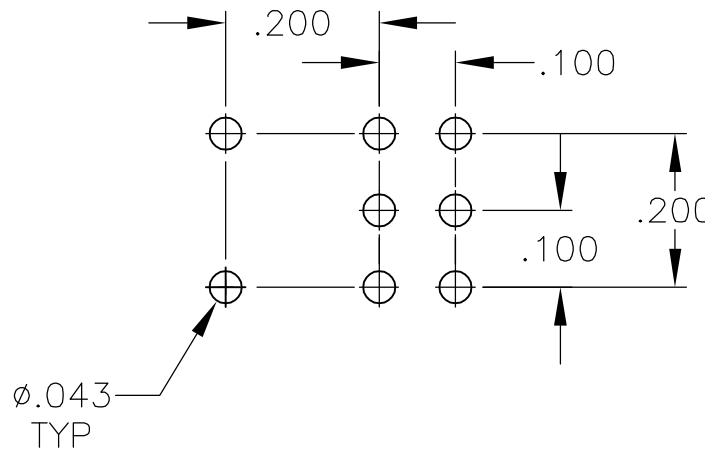
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TOLERANCES +/- .002



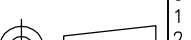
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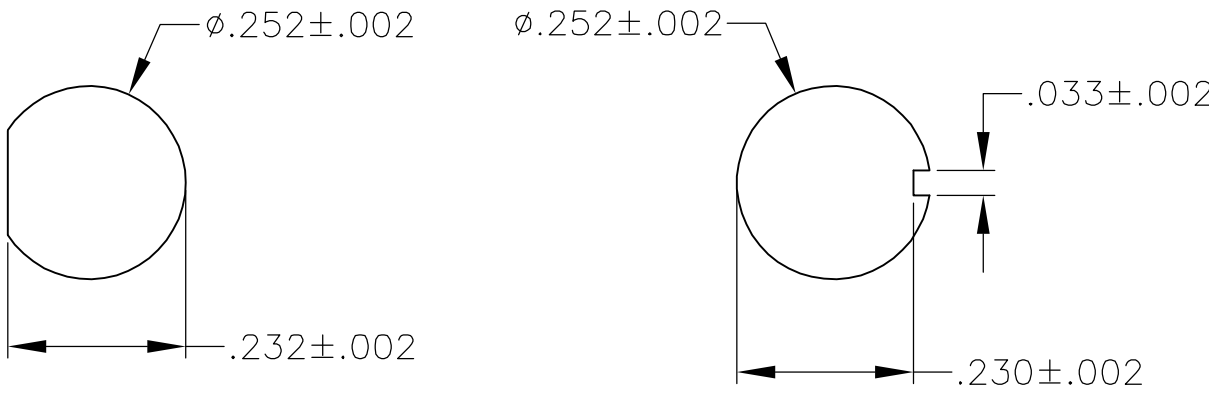
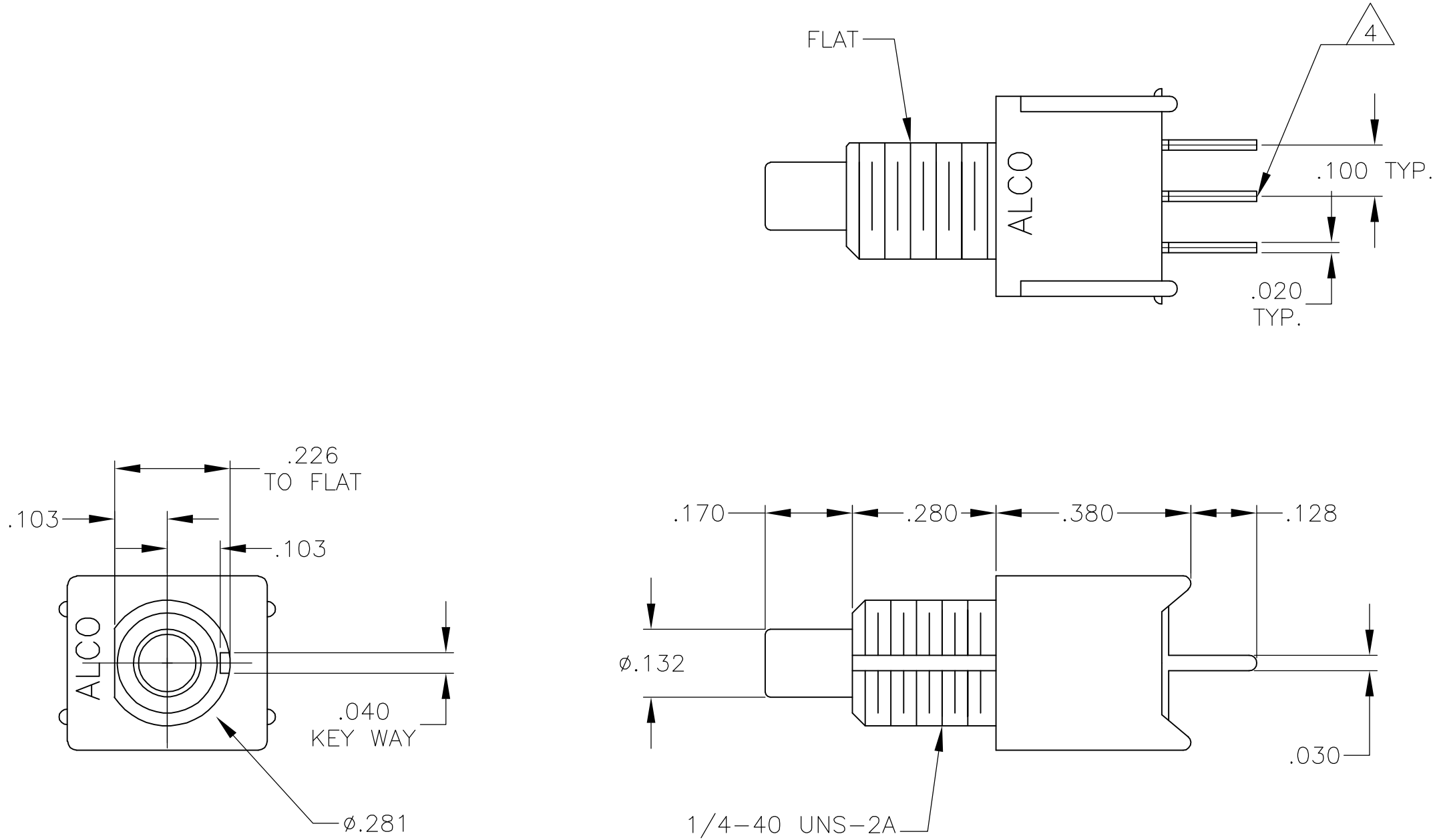
RECOMMENDED PANEL LAYOUTS



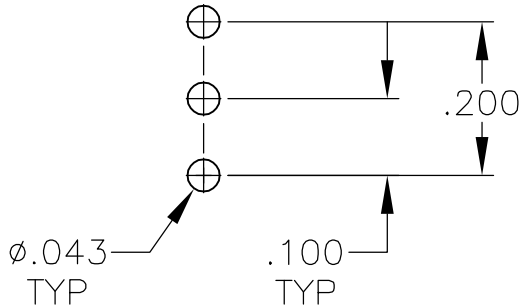
RECOMMENDED PCB LAYOUT
TOLERANCES +/- .002

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DIMENSIONS: INCHES		CHK —	APVD —	NAME PUSHBUTTON SWITCH, TPF SERIES		—	
		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± — 1 PLC ± — 2 PLC ± — 3 PLC ± .010 4 PLC ± .5 ANGLES ± .5° FINISH —		PRODUCT SPEC — APPLICATION SPEC —		—	
MATERIAL —	WEIGHT —		SIZE A1		CAGE CODE 00779	DRAWING NO 1825100	RESTRICTED TO —
CUSTOMER DRAWING				SCALE 4:1	SHEET 3 OF 5	REV A	

LOC	DIST	REVISIONS					
AD	00	P	LTR	DESCRIPTION	DATE	DWN	APVD
			—	SEE SHEET 1	—	—	—



RECOMMENDED PANEL LAYOUTS



RECOMMENDED PCB LAYOUT
TOLERANCES $\pm .002$

TPF11CGPCES, TPF11FGPCES

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN RACHU	12-7-05	tyco <i>Electronics</i>		Tyco Electronics Corporation Harriaburg, Pa 17105-3608	
		CHK —					
DIMENSIONS: INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD —	NAME PUSHBUTTON SWITCH, TPF SERIES			
		0 P.LC ± —	PRODUCT SPEC —				
		1 P.LC ± —	APPLICATION SPEC —				
		2 P.LC ± .010	—				
		4 P.LC ± ± 3°	—				
MATERIAL —	FINISH —	WEIGHT —	SIZE A1 00779		CAGE CODE C=1825100	DRAWING NO —	RESTRICTED TO —
CUSTOMER DRAWING			SCALE 4:1		SHEET 5 OF 5		REV A