

TP_ES Series, Tiny, Process Sealed

Features

- Process and non-process sealed
- Compact design
- Vertical or right angle versions



Typical performance characteristics

Contact configuration SPST, SPDT, DPDT
Contact timing Break-Before-Make
Contact rating max. gold: 0.4VA @20VDC or peak AC
..... silver: 1A @ 125VAC or 28 VDC resistive
Electrical life 1 pole2 ..2 pole
..... gold 100,000 ..80,000 cycles
..... silver 60,000 ..50,000 cycles
Contact resistance, initial. max.20 mOhms
Insulation resistance 1,000 MOhms @ 500VDC
Dielectric strength 1,000 Volts rms @ sea level
Actuation force 0.5 to 4N (50-400gf)
Actuator travel momentary .030" (.762)

Environmental specification

Operating temperature -30°C to +65°C
Storage temperature -30°C to +65°C
Solder heat resistance wave solder capable to 265° C
Seal versions with process seal, with disposable cap

Material specifications

Contacts copper or brass, gold over nickel finish or silver
..... clad with silver over nickel finish
Actuator thermoplastic
Terminals brass with gold over nickel or silver over nickel
Case thermoplastic
Frame and support bracket. steel with tin over copper finish
RoHS Directive 2002/95/EC compliant

Product key		Typical product key				TP	B		1	1	C	G	RA	ES	0	04				
Type																				
TP	Tiny pushbutton series																			
Bushing																				
B	round .188 (4.78) dia. bushing not threaded																			
F	round 1/4-40 UNS 2B thread																			
Actuator																				
blank	standard																			
F	flush (available with B bushings only)																			
Number of Poles																				
1	single pole																			
Contact rating																				
1	0.4VA Gold																			
Function																				
C	single throw, momentary																			
F	double throw, momentary																			
Plating																				
G	Gold																			
Terminals																				
PC	printed circuit board																RA	right angle (right angle, ES available with B and C bushing only)		
Process Seal																				
ES	process sealed with disposable boot, epoxied double case																			
Button Color																				
0	black				2		red				6		blue							
Material																				
04	RoHS compliant																			

TP_ES Series, Tiny, Process Sealed (Continued)

Bushing

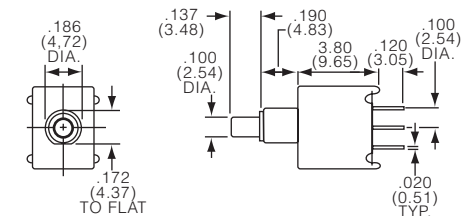


B, Round .188 (4.78) dia. bushing not threaded

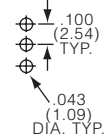
printed circuit board



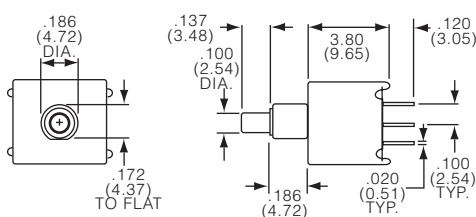
TPB11CGPCES



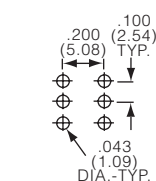
Note: no center terminal on 'C' function switch



TPB21RGPCES



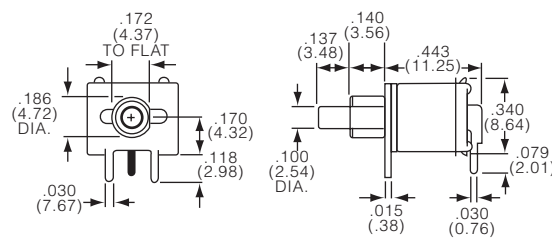
Note: no center terminals on 'M' function switch



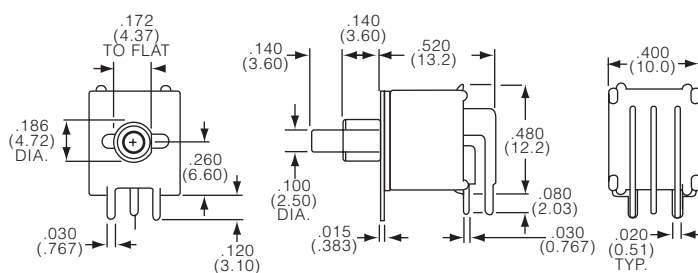
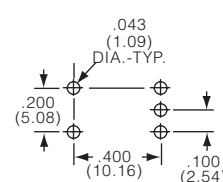
right angle



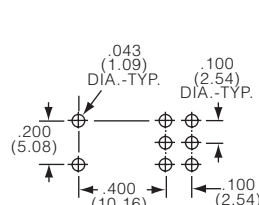
TPB11CGRAES



Note: no center terminal on 'C' function switch



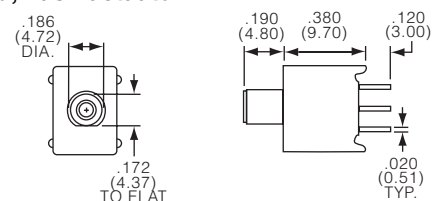
Note: no center terminals on 'M' function switch



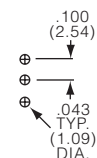
printed circuit board, flush actuator



TPBF11CGPCES

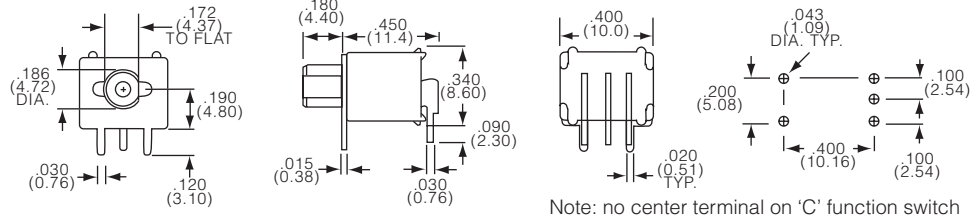


Note: no center terminal on 'C' function switch



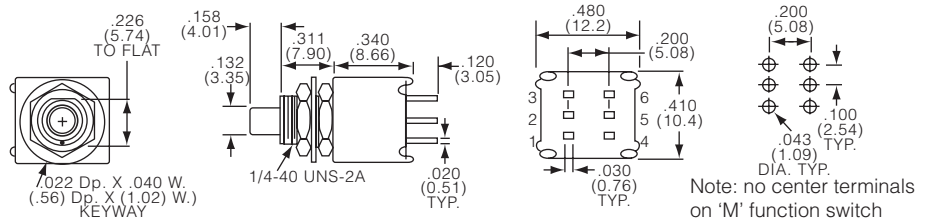
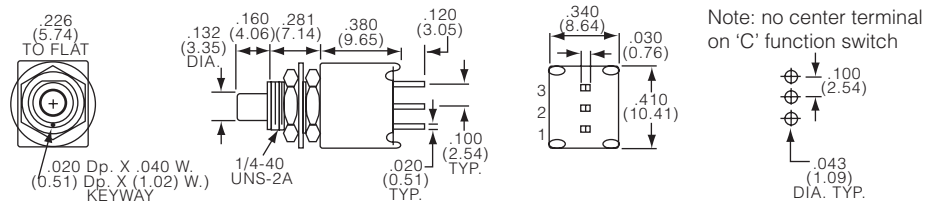
TP_ES Series, Tiny, Process Sealed (Continued)

right angle, flush actuator



F, Round 1/4-40 UNS 2B thread

printed circuit board



Product key	Bushing	Act.	Poles	Rating	Function			Plating	Terminals	Btn.	Material	Part Number
TPB11CGPCES004	round	std	1	0.4VA	Off-(On)	Off	1-3	Gold	pcb	black	RoHS compliant	1825097-3
TPB11CGRAES004	.188 (4.78)								right angle			1825097-5
TPB11CGRAES204	dia									red		1825097-7
TPB11FGPCES204	bushing, not threaded				On-(On)	1-2	2-3		pcb			1-1825097-0
TPB11FGRAES004									right angle	black		1-1825097-4
TPB11FGRAES604										blue		1-1825097-5
TPBF11CGPCES004		flush			Off-(On)	Off	1-3		pcb	black		2-1825097-0
TPBF11CGRAES004									right angle			2-1825097-2
TPBF11FGPCES004					On-(On)	1-2	2-3		pcb			2-1825097-3
TPBF11FGRAES004									right angle			2-1825097-6
TPF11CGPCES004	1/4-40	std			Off-(On)	Off	1-3		pcb			1825100-3
TPF11FGPCES004	UNS 2B				On-(On)	1-2	2-3					1-1825100-0