

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

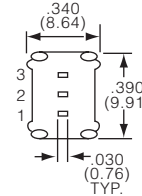
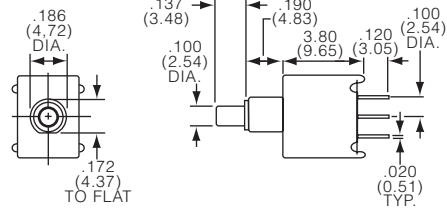


B, Round .188 (4.78) dia. bushing not threaded

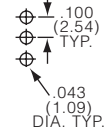
printed circuit board



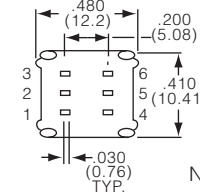
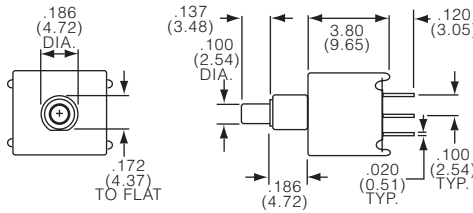
TPB11CGPCES



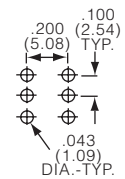
Note: no center terminal on 'C' function switch



TPB21RGPCES



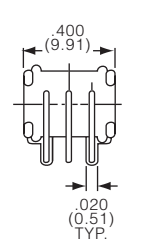
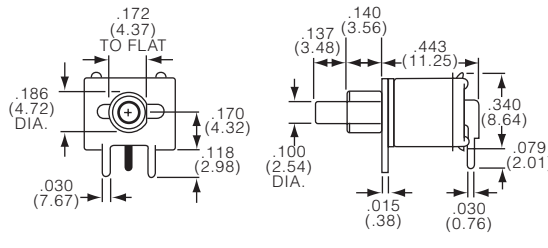
Note: no center terminals on 'M' function switch



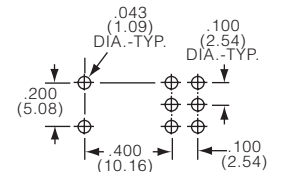
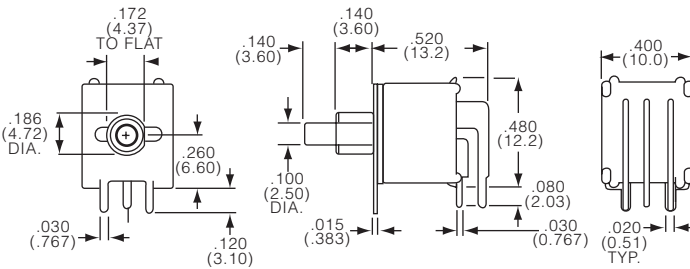
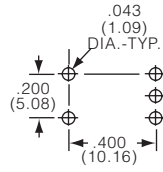
right angle



TPB11CGRAES



Note: no center terminal on 'C' function switch

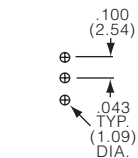
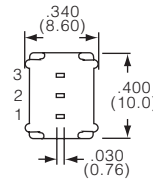
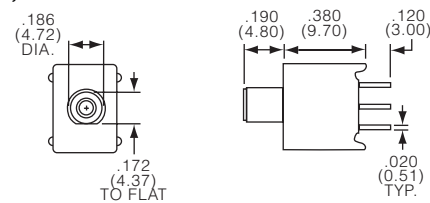


Note: no center terminals on 'M' function switch

printed circuit board, flush actuator



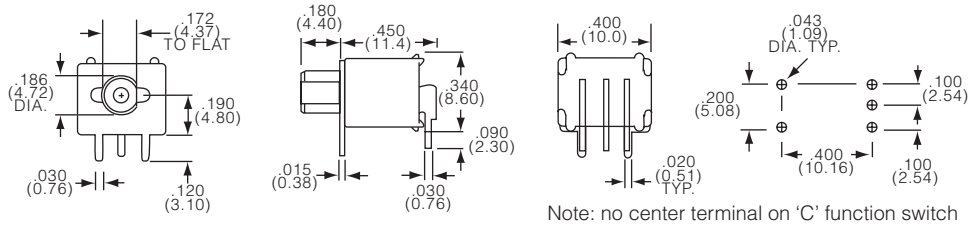
TPBF11CGPCES



Note: no center terminal on 'C' function switch

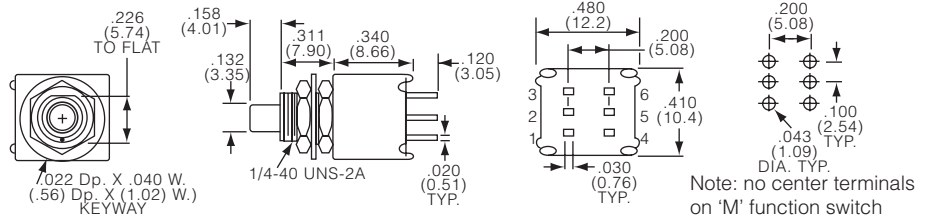
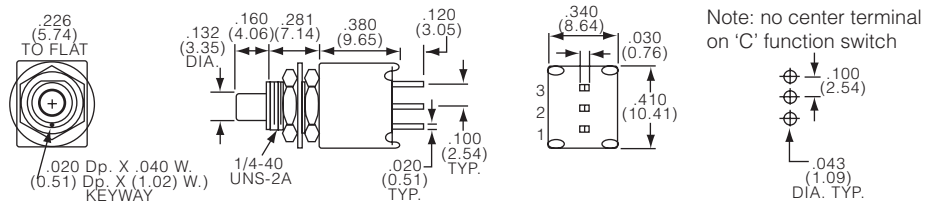
TP_ES Series, Tiny, Process Sealed (Continued)

right angle, flush actuator



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

printed circuit board



Product key	Bushing	Act.	Poles	Rating	Function	Off	On	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				On-(On)	1-2	2-3		pcb			1-1825097-0
TPB11FGRAES004	threaded								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