

A

摇头开关

通用规格

电气容量 (电阻性负载)

微小功率: 最大0.4VA在最高28V AC/DC
(适用范围0.1mA~0.1A在20mV~28V)
注: 请参阅附录中关于运行范围的更多说明。

其他额定参数

触点电阻: 最大50毫欧
绝缘电阻: 1,000兆欧以上在500V DC
绝缘强度: 触点间最低1,000V AC至少1分钟;
触点与外壳之间最低1,500V AC至少1分钟
机械寿命: 100,000次操作以上对于搬动杆型号
50,000次操作以上对于锁定杆型号
电气寿命: 50,000次操作以上
接触时间点: 无短路 (接触前先断开)
摆动角度: 24°

材质和涂覆

摇杆/搬动杆: 黄铜镀铬
衬套: 黄铜镀镍
支撑支架: 直型PC端子: 磷青铜镀锡; 直角型和垂直型: 黄铜镀锡
外壳: 聚对苯二甲酸丁二醇酯(PBT) (UL94V-0)
基座: 1和2极GFR聚酰胺(UL94V-0); 4极液晶聚合物(LCP) (UL94V-0)
活动触点: 磷青铜镀金
固定触点: 黄铜镀金
端子: 黄铜镀金

环境数据

工作温度范围: -10°C到+70°C (+14°F到+158°F)
湿度: 240小时内 在40°C (104°F)时, 湿度90~95%
振动: 用1.5mm峰-峰振幅遍历10~55Hz频率范围、并在1分钟内返回; 3个直角方向2小时
冲击: 50G (490m/s²) 加速度 (在6个直角方向上在6个直角方向上测试, 每个方向5次冲击)

印刷电路板处理

焊接: 推荐波峰焊。请参阅附录中的概略图A。
手工焊接: 1和2极-最多3秒钟在最高350°C;
4极-最多4秒钟在最高410°C
清洗: 用酒精溶剂就地手工清洗。
请参阅附录中的清洗规格。

标准和认证

易燃性标准: 符合UL94V-0规定的外壳和基座
UL认证或CSA认证: D2系列摇头开关未经过UL认证测试或CSA认证测试。
这些开关为在低电流、微小功率电路中使用而设计。
当按原意图用于微小电流电路时, 其结果不会产生危险的能量。

主要特点

A

摇头开关

隔热树脂制成的基座符合UL94V-0易燃性标准的规定。

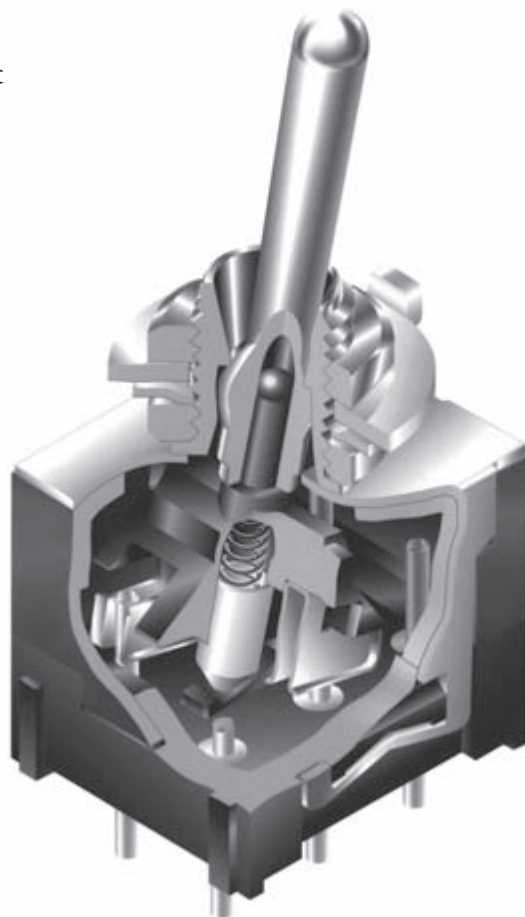
48V的最大电压容量可允许在中等功率源条件下使用，并延长运行寿命。

获奖的STC触点机构具有传统触点机构所不具备的如下优点：更加平滑、制动更可靠、触点稳定性更高、以及无与伦比的可靠性。（关于STC的术语和缩写的详情，请参阅附录目录。）

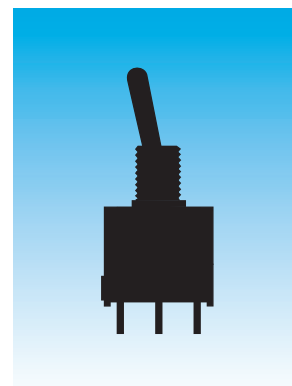
直径为0.8mm的圆形印刷电路端子便于在印刷电路板上组装。

端子间距与标准的2.54mm印刷电路板格子间距一致。

注塑端子可阻止熔融物、溶剂、以及其他污染物侵入。



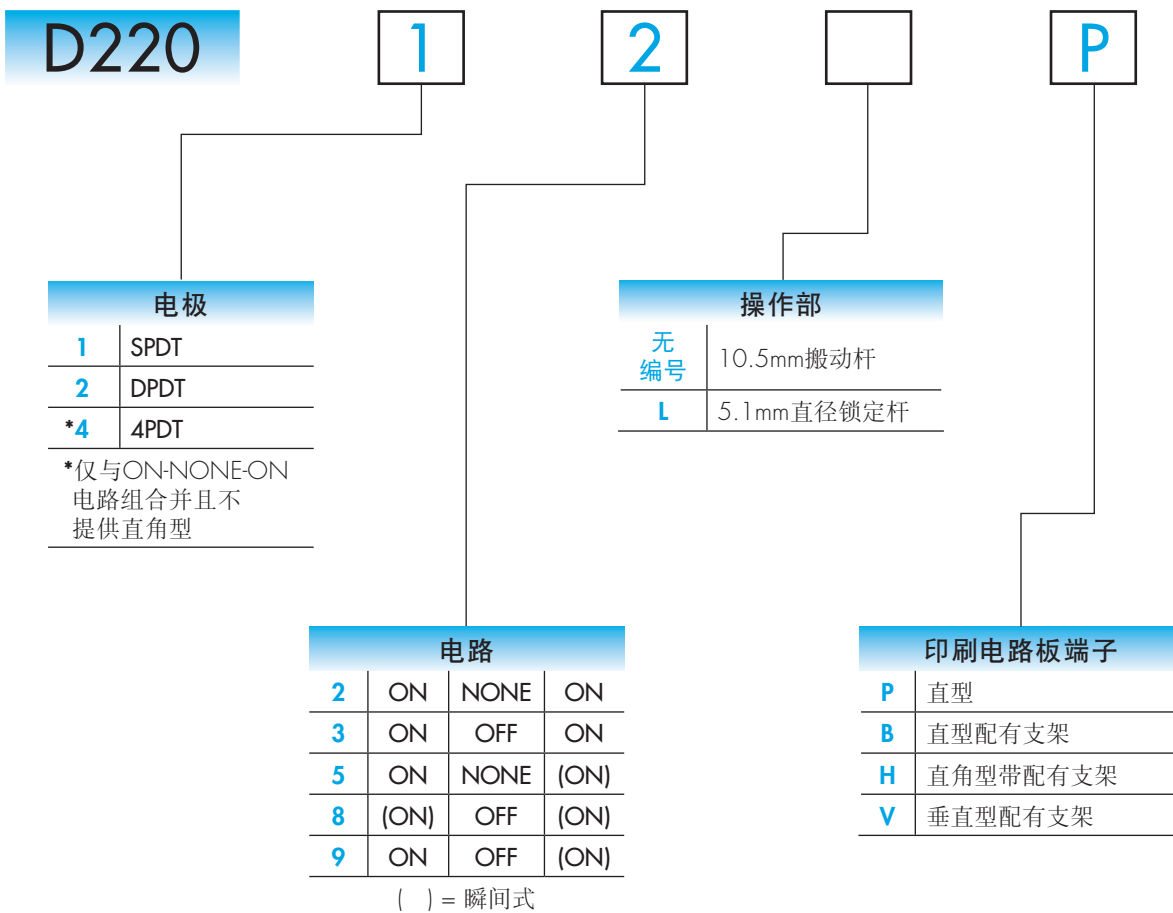
实际尺寸



典型开关订购举例

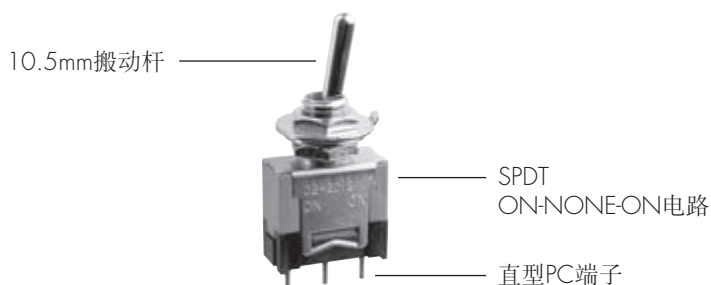
A

摇头开关



典型订购举例

D22012P



电极和电路

电极	型号	摇杆位置 () = 瞬间式			连接的端子			投掷及其示意图
		下 键槽	中	上	下 键槽	中	上	
SP	D22012 D22013 D22015 D22018 D22019	ON ON ON (ON) ON	NONE OFF NONE OFF OFF	ON ON (ON) (ON) (ON)	2-3	OPEN	2-1	SPDT
DP	D22022 D22023 D22025 D22028 D22029	ON ON ON (ON) ON	NONE OFF NONE OFF OFF	ON ON (ON) (ON) (ON)	2-3 5-6	OPEN	2-1 5-4	DPDT
4P	D22042	ON	NONE	ON	2-3 5-6 8-9 11-12	OPEN	2-1 5-4 8-7 11-10	4PDT

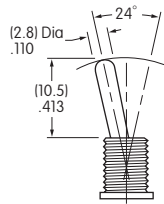
注: 端子编号并未实际印制在开关上。

操作部

无编号

10.5mm搬动杆

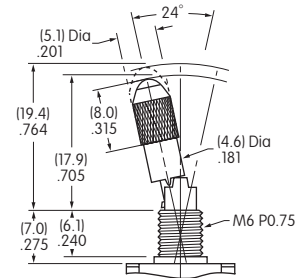
材质: 黄铜镀铬



L

5.1mm直径锁定杆

材质: 黄铜镀铬



印刷电路板端子

P

直型



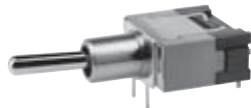
B

直型配有
支架



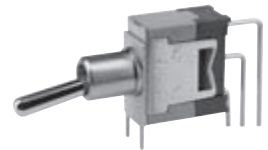
H

直角型配有支架



V

垂直型配有支架

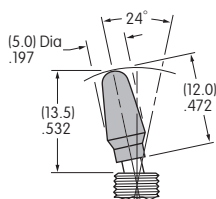


可供选购的盖帽和盖帽颜色

AT415
搬动杆盖帽

材质: 聚乙烯

可供颜色:
A B C E F G

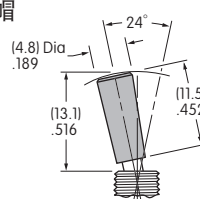


颜色编号:

AT444
搬动杆圆锥形盖帽

材质: 聚乙烯

可供颜色:
A B C E F G



A 黑

B 白

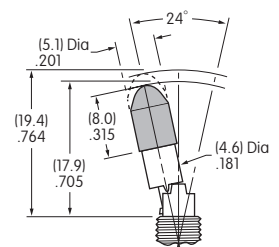
C 红

E 黄

AT427
随同锁定杆提供的
盖帽

材质: 铝

可供颜色:
A C G



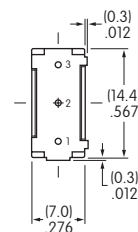
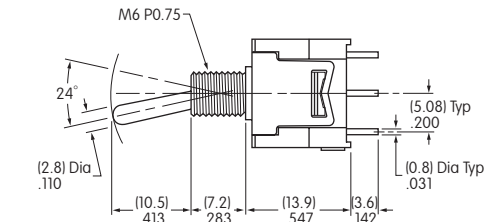
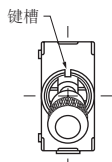
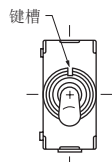
F 绿

G 蓝

典型开关尺寸

A
摇头开关

直型PC端子 · 单极

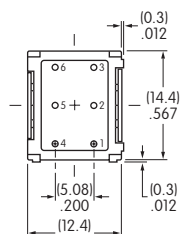
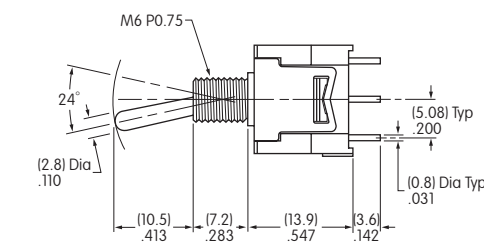
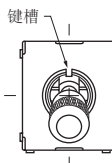
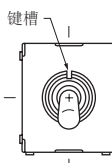


D22012P

D22012LP

操作部按下位置

直型PC端子 · 双极

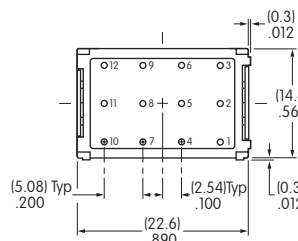
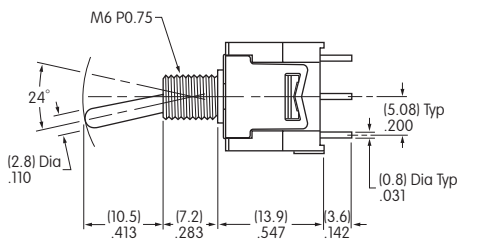
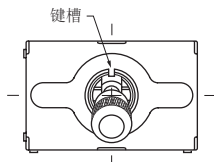
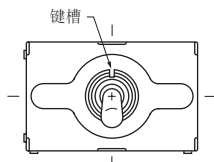


D22022P

D22022LP

操作部按下位置

直型PC端子 · 4极



D22042P

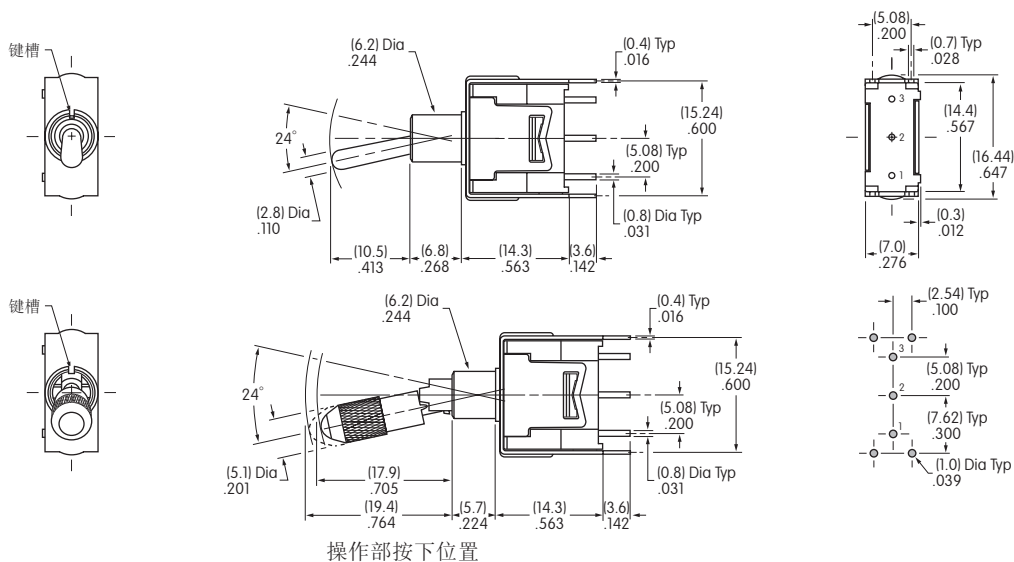
D22042LP

操作部按下位置

典型开关尺寸

A
摇头开关

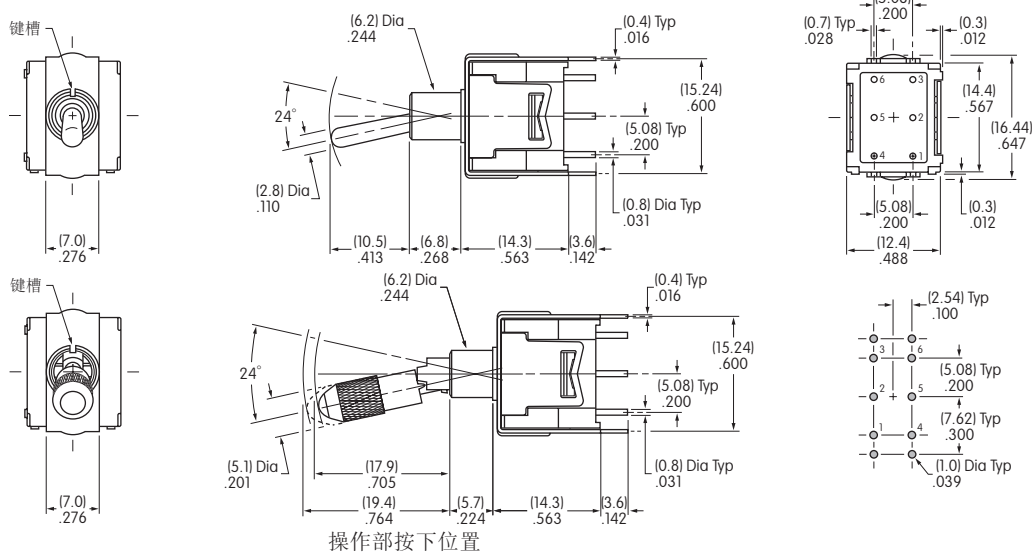
直型PC端子·支架
单极



D22012B

D22012LB

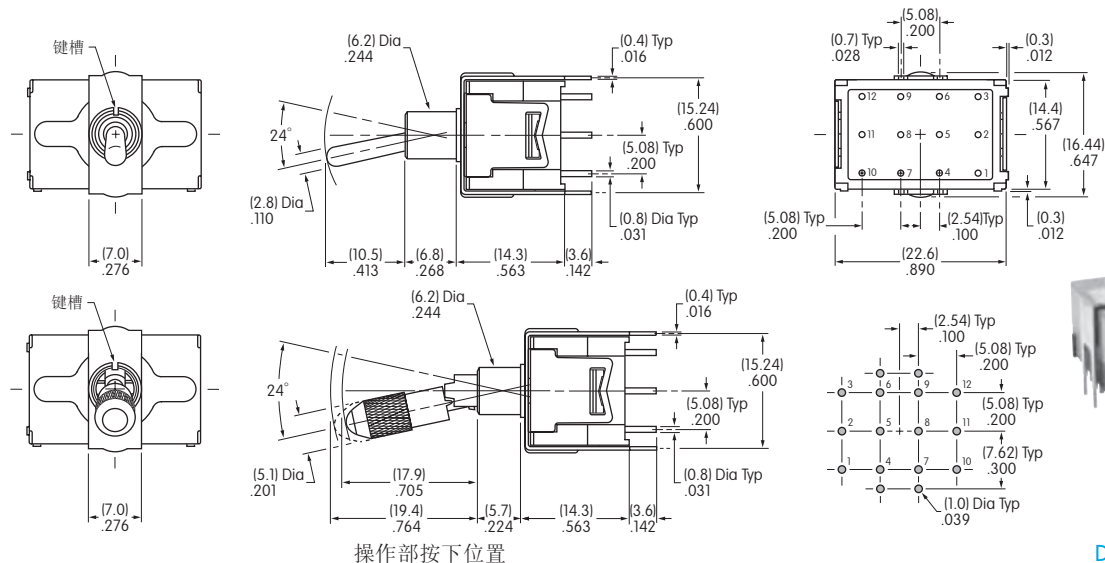
直型PC端子·支架
双极



D22022B

D22022LB

直型PC端子·支架
4极



D22042B

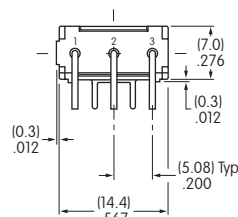
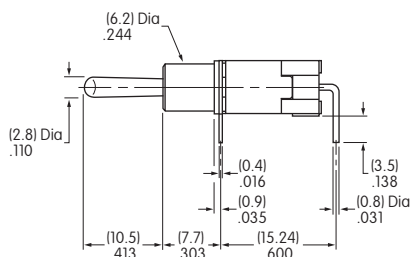
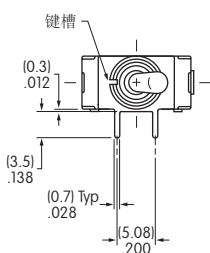
D22042LB

典型开关尺寸

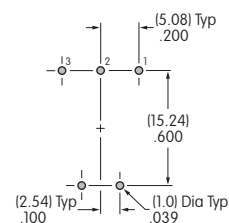
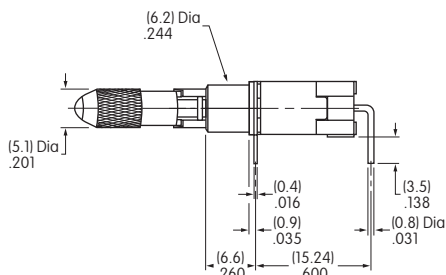
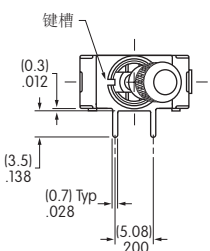
A

摇头开关

直角型PC端子·单极



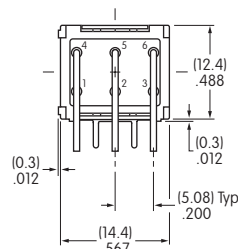
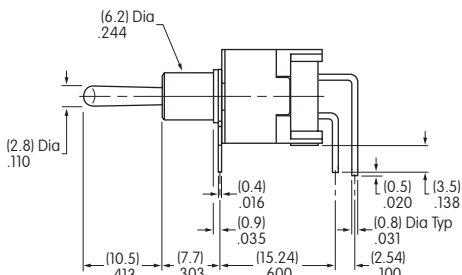
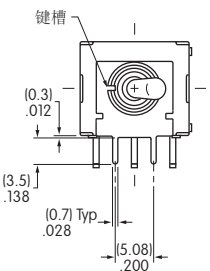
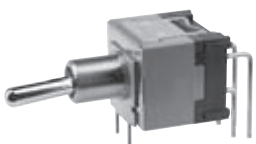
D22012H



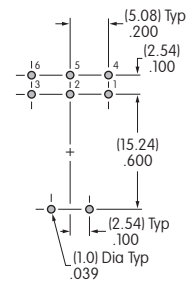
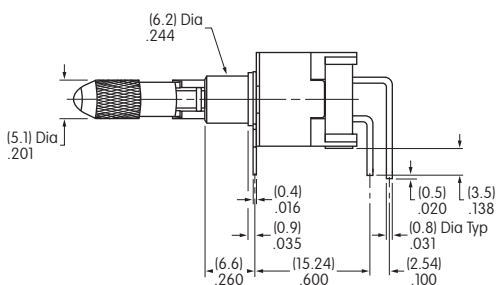
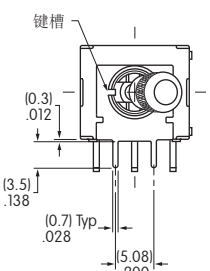
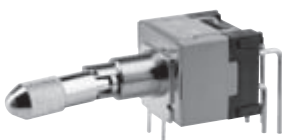
D22012LH

操作部按下位置

直角型PC端子·双极



D22022H



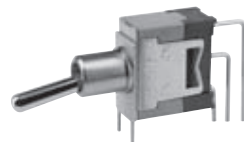
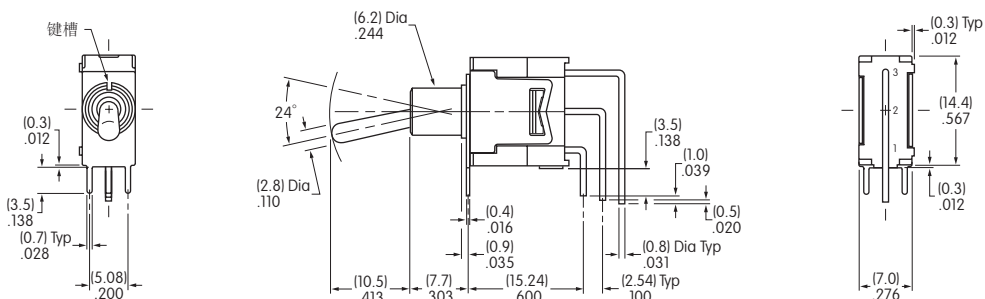
D22022LH

操作部按下位置

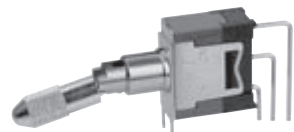
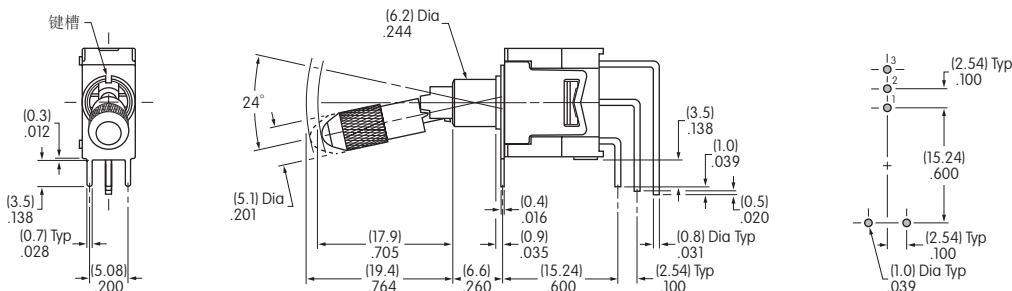
典型开关尺寸

A
摇头开关

垂直型PC端子 · 支架
单极



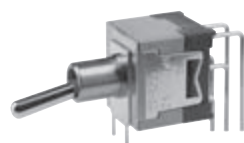
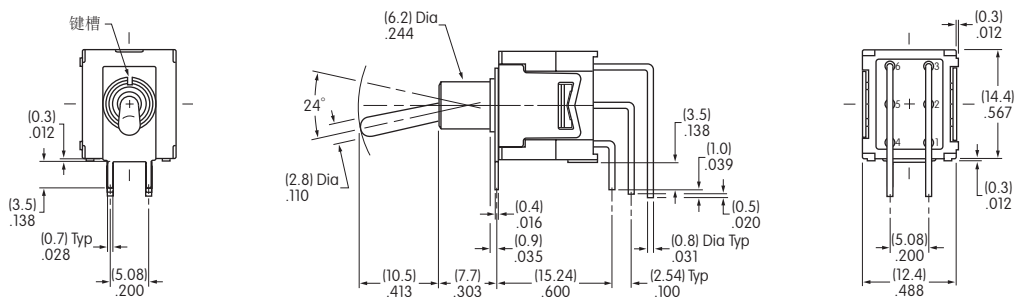
D22012V



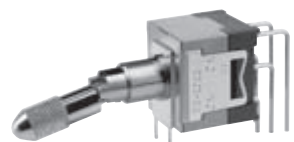
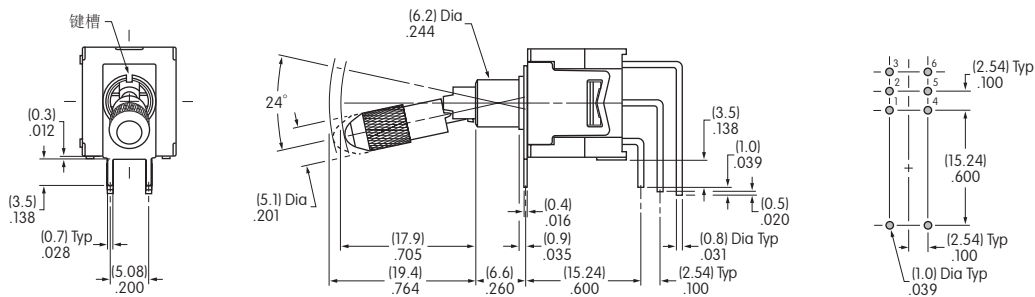
D22012LV

操作部按下位置

垂直型PC端子 · 双极



D22022V

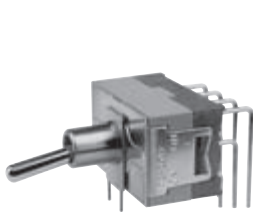


D22022LV

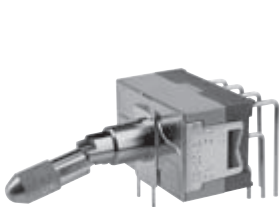
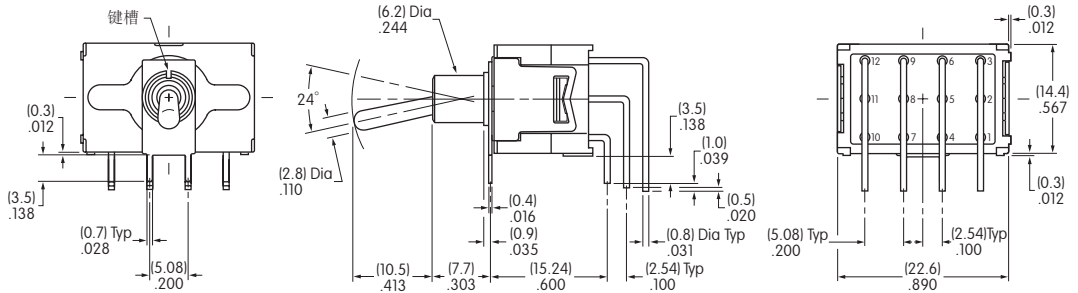
操作部按下位置

典型开关尺寸

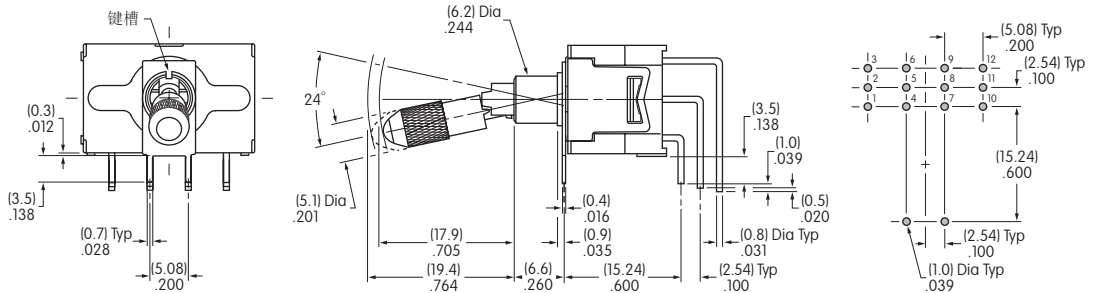
垂直型PC端子·4极



D22042V



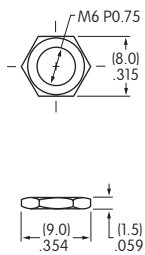
D22042LV



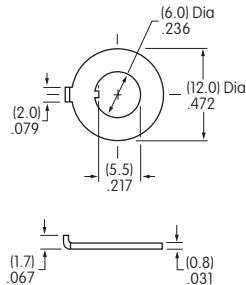
操作部按下位置

标准配件

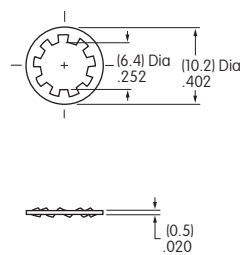
AT513M
六角螺母
黄铜镀镍
附送2个



AT507M
锁环
钢镀锌/铬
附送1个

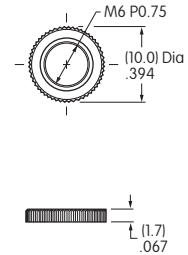


AT509
锁紧垫圈
钢镀锌/铬
附送1个



可供选购配件

AT501M
滚花螺母
黄铜镀镍

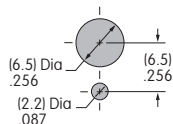


面板裁切和最大面板厚度

有标准配件

2.2mm
对于标准杆

1.3mm
对于锁定杆



无底部六角螺母

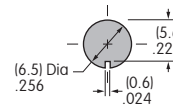
3.9mm
对于标准杆

2.8mm
对于锁定杆

无锁环

3.0mm
对于标准杆

2.1mm
对于锁定杆



无锁环和底部六角螺母

4.7mm
对于标准杆

3.6mm
对于锁定杆