



SWITCH SERIES

直流开关系列



Product series: DPF MODEL:DPF



General Characteristics

Function:

- Lithium battery variable speed version
- Integrated mechanical reversing
- Lithium battery integrated smart switch (optional multiple electronic functions)
- Lithium battery ON/OFF version
- Various duty cycle and freguency

Electronic protection function:

- Auxiliary output for LED
- Overland and over current protection
- Battery temperature protection
- Mosfet temperature protection
- Stall protection
- Battery Single cell collage protection
- ESD protection
- Commonication function
- Customized other electronic functions

Terminals:

- Solder terminal or Q.C. Terminal for Motor
- Solder terminal for power supply

Applications:

· Apply to lithium battery serial tools , including Drills , Wrenches , Hammers , Saws, etc.

一般的规格参数

产品功能:

- 锂电调速开关
- 内置机械换向
- 锂电智能集成开关 (带电子功能)
- 锂电ON/OFF开关
- 可带刹车功能
- 不同占空比和频率

电子保护功能:

- 可带LED灯
 - 过流保护
 - 电池温度保护
 - FET温度保护 • 堵转保护
 - 单电池保护
 - 静电保护
 - 通信功能
 - 客户定制的其他电子功能

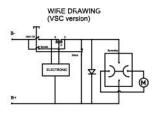
- 马达端子为焊锡端子或快插端子
 - 电源端子为焊锡端子

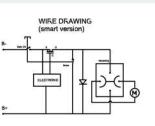
应用:

端子:

• 适用于锂电工具系列,包括电钻、扳手、电 锤、锯等

Circuit Diagram 原理图



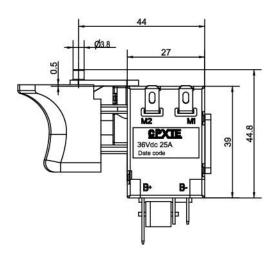


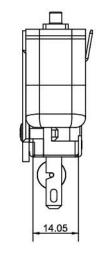
Approvals 安规认证

Models	Aı	oprobation:
	c All us	05
Mod : DPF	10~30A 24~42Vdc 5E4	15~30A 24~48Vdc 5E4

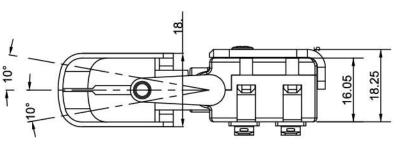
型号 DPF

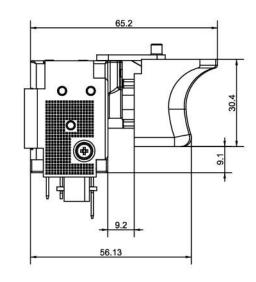
Switch Base Shape (开关)本体形状





NINGBO CPX ELECTRONICS TECHNOLOGY CO., LTD. /12





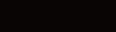
未来电动工具发展的趋势是 DC、小型化、更轻便、动力 更强劲、更加智能化.....

The Design trend of Power Tools-DC,Smaller,Lighter,More powerful,Smarter.....

"CPXTE"锂电智能开关,功 能稳定、安全可靠

"CPXTE" DC Smart Switch, with stable functions, safe and reliable





用于<62Vdc无刷系列工具的调

"CPXTE"开关安全可靠、寿命

阻开关(可选带主触点机构)

Variable resistance switches

contact system.

Longer service life.

specially for < 62Vdc brushless serial

"CPXTE" switch safe and Reliable,

power tools. With or without main

更长。



Product series: DPA

MODEL 04

General Characteristics

- Single pole switch with speed control electronics
- Electronic reversing for Brushless Tools
- Switch for high power brushless tools

Optional:

- Reversing • ON/OFF switch for lithium battery/brushless • 锂电/无刷大功率ON/OFF开关
- Potentiometer

high power tools

- Trigger Shape&dimension customized
- Diode

Output:

- Solder terminal/wire
- Connector for potentiometer & reversing & 连接器 (供可变电阻输出及电子换向及

Applications:

· Apply to brushless serial tools, including Drills, Wrenches , Hammers , Saws , etc.

信号版本

一般的规格参数

产品功能:

- 单极带可变电阻输出的开关
- 电子换向,用于无刷系列工具
- 大功率无刷工具开关

可选择的附加功能有

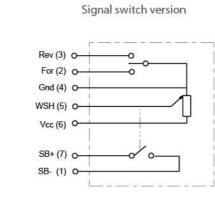
- 可变电阻
- 扳机形状及尺寸可按客户定制。
- 二极管

输出:

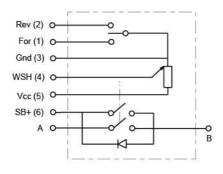
- 焊锡端子/导线
- ON/OFF前后端子型号)

• 适用于无刷系列工具,例如电钻、扳手、电 锤、锯等。

Circuit Diagram 原理图







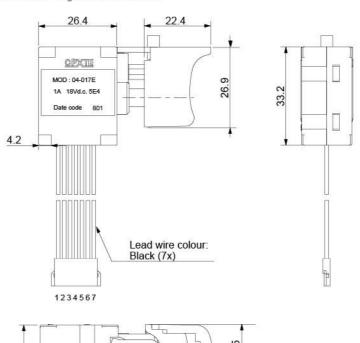
Approvals 安规认证

	Approbation:	
Models	c FLI us	05
Mod : 04	10-30A 24-48Vdc 5E4 10A up to 30A 24Vdc-62Vdc 5E4	15-30A 24-62Vdc 5E4

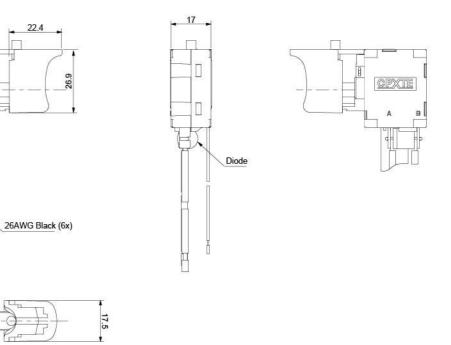
型号 04

信号版本 Signal switch version

Switch Base Shape (开关)本体形状



过大电流版本 Excessive current version





15/ 宁波卡派斯电子科技有限公司

NINGBO CPX ELECTRONICS TECHNOLOGY CO., LTD. /16



Product series: DPE MODEL DPE

General Characteristics



Function:

- Single pole switch with speed control electronics
- Mechanical reversing/Electronic reversing
- Small volume switch for higher power DC serial tools

产品功能:

• 刹车功能

• 换向功能 • ON/OFF开关

• 可变电阻

• 二极管

单边限速(限位)

- 单极带可变电阻输出的开关
- 机械换向/电子换向

可选择的附加功能有:

一般的规格参数

• 小型化开关,用于较大功率DC系列工具



Optional:

- Brake
- Reversing module
- ON/OFF version
- Potentiomter
- Unilateral speed limit
- Trigger shape and size can be customized

• Solder or 4.8x0.8mm Quick-Connect Terminal

• 焊接端子或快接端子4.8*0.8mm

• 扳机形状尺寸可按客户定制

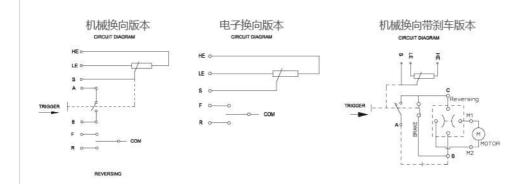
Applications:

• Apply to lithium battery serial tools, such as Drills , Wrenches, Hammers, Saws, etc.

应用:

• 适用于锂电系列工具,例如电钻、扳手、电 锤、锯等

Circuit Diagram 原理图



Approvals 安规认证

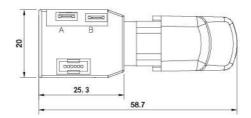
Models	Approbation:		
	c FLI us	05	cac
Mod : DPE	15)15)A 127Vac 5E4 10(10)A 250Vac 5E4 25.1A 36Vd.c.5E4	15)15)A 127Vac 5E4 10(10)A 250Vac 5E4 25.1A 36Vd.c.5E4	N/A

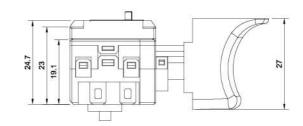
型号 DPE

Switch Base Shape (开关)本体形状

过大电流, 电子换向版本

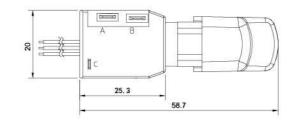
Excessive current, electronics reversing version

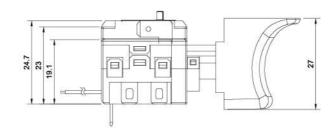




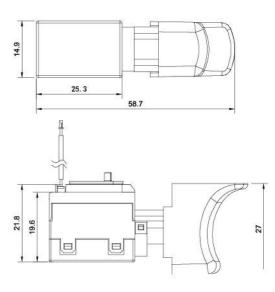
过大电流, 机械换向版本

Excessive current, mechanical reversing version





全信号开关版本 Signal switch version



NINGBO CPX ELECTRONICS TECHNOLOGY CO., LTD. /18 17/ 宁波卡派斯电子科技有限公司



Product series: SDC MODEL 61







General Characteristics

Function:

• Single pole potentiometer switch.

Optional:

- Brake.
- Reversing module.
- Jumper wires between reversing module and main switch.
- Potentiometer.
- Various shapes and dimensions of Trigger head.

Terminals:

- Solder or fast-on lugs 4.7x0.8mm.
- Supplied with or without leads.

• DC electric tools and garden tools such as Grass trimmer, blower, Chain saw

一般的规格参数

产品功能:

• 单极带可变电阻输出开关。

可选择的附加功能有:

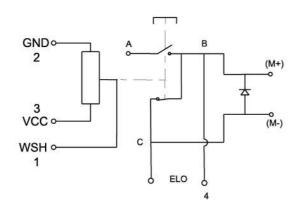
- 刹车。
- 在断电条件中对工具进行换向的换向模块。
- 连接换向模块和开关主体的导线。
- 扳机和换向杆的形状和尺寸可按客户要求定 制。

端子:

- 焊接或者快接端子 4.7x0.8mm。
- 有/无导线。

• 使用在直流电动工具及园林工具上,例如打 草机、吹风机、链锯

Circuit Diagram 原理图



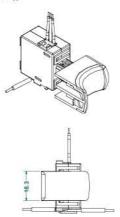
Approvals 安规认证

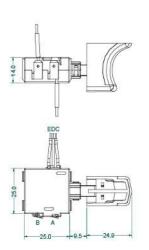
Models	Approbation:		
	c FLL us	05	cac
Mod : 61	0-25A 0-36Vdc 5E4	8A up to 25A 7.2Vdc -36Vdc 5E4	12A up to 20A 12Vdc -28Vdc 5E4

型号 61

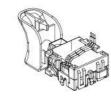
Switch Base Shape (开关)本体形状

I Potentiometer switch ((可变电阻输出开关))

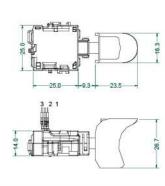




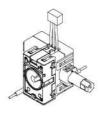
 Π Potentiometer switch with brake (可变电阻输出带刹车开关)



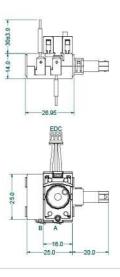




 ${\rm I\hspace{-.1em}I\hspace{-.1em}I}$ Potentiometer switch with brake and reversing module (可变电阻输出带刹车和换向功能)







19/ 宁波卡派斯电子科技有限公司 NINGBO CPX ELECTRONICS TECHNOLOGY CO., LTD. /20

CPXTE 卡 派 斯

Product series: HP

MODEL 06







General Characteristics

Function:

- Single pole switch with speed control electronics and bypass contact.
- · Brake.
- · Also available as on/off switch.

Optional:

- Reversing module with zero current switching rotation mode.
- Brake function
- Jumper wires between reversing module and main switch.
- · Potentiometer.
- Various shapes and dimensions of triggerhead and reversing lever.

Terminals:

Push-in terminals.

Applications:

 Professional and DIY-products such as Drill, Jigsaw and Reciprocating saw.

一般的规格参数

产品功能:

- 具有可变速度和全速控制的单极开关。
- 刹车。
- On-Off 版本。

可选择的附加功能有:

- 在断电条件中对工具进行换向的换向模块。
- 连接换向模块和开关主体的导线。
- 可变电阻输出。
- 扳机和换向杆的形状和尺寸可按客户要求 定制。
- 刹车功能

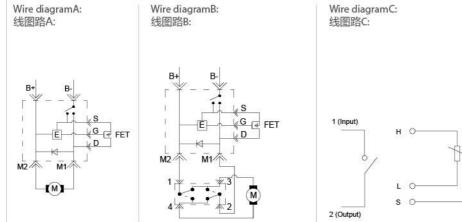
端子:

• 插线端子。

应用:

可以适用于专业类或者DIY类的工具上,例如电钻,曲线锯,往复锯。

Circuit Diagram 原理图

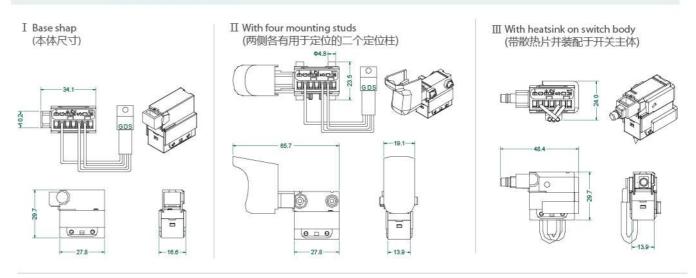


Approvals 安规认证

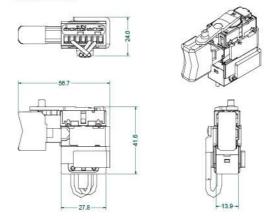
Models	Approbation:		
	c FLI us	05	cac
Mod : 06	0-20A 0-24Vdc 5E4 0-20A 0-36Vdc 5E4	8A up to 20A 7.2Vdc -36Vdc 5E4	8A up to 20A 12Vdc -36Vdc 5E4

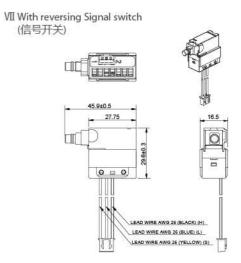
型号 06

Switch Base Shape (开关)本体形状

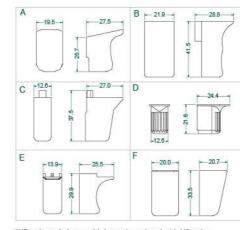






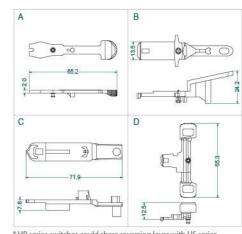


Trigger Head Options (可选的扳机形状)



*HP series switches could share trigger head with US series.
*HP 系列开关基本上能与US系列共用扳机.

Lever Options (可选的换向杆形状)



* HP series switches could share reversing lever with US series.
*HP 系列开关基本上能与US系列共用换向杆.

NINGBO CPX ELECTRONICS TECHNOLOGY CO., LTD. /22



Product series: CHA MODEL 15







General Characteristics

Function:

- · Anti-tease contact system.
- High AC rating.
- Double pole single throw or single pole double throw with brake.
- · Screw terminals.
- · Dust protected.
- · No lock or lock on or with safety lock function.
- · Lock button and triggerhead in various size and shapes.

Applications:

 Heavy duty Class
 appliances for instance Angle grinder, Circular Saw, Marble Cutter, Cut-Off machine.

一般的规格参数

产品功能:

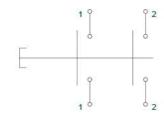
- 瞬间过档的触点机构。
- 大额定功率的AC开关。
- 双极单掷或者单极双掷带刹车。
- 锁螺丝端子结构。
- 防尘保护。
- 开关可选不带锁住功能,带自锁或者反 自锁功能。
- 锁的和扳机有不同的尺寸以及外形的选 择。

应用:

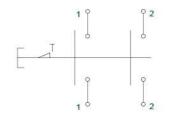
• 使用在重型的Ⅱ类器具上,例如角磨 机,圆锯,云石切割机,切割锯。

Circuit Diagram 原理图

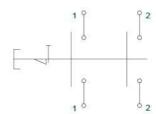
Double pole with No Lock 双极不带锁住功能



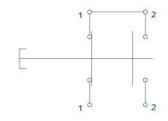
Double pole with lock on 双极带锁住功能



Double pole with safety lock 双极带反自锁功能



Single pole with break 单极带刹车功能

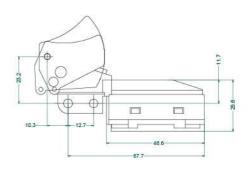


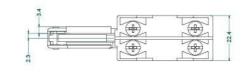
Approvals 安规认证

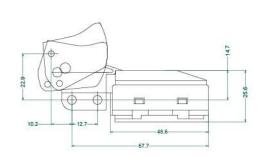
Ĭ	Approbation:		
Models	c Fl us	05	cec
Mod:15	10(10)A up to 22(22)A 125Vac 5E4 30A 24-48Vdc 5E4 15A 127Vdc 5E4	8(8)A up to 12.5(12.5)A 250Vac 5E4 10(10)A up to 22(22)A 127Vac 5E4 30A 24-48Vdc 5E4	8(8)A up to 12.5(12.5)A 50Vac 5E4 30A 24-48Vdc 5E4

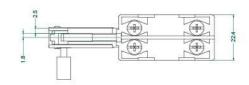
型号 15

Switch Base Shape (开关)本体形状

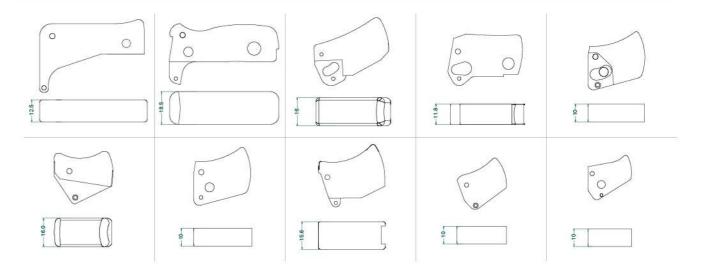




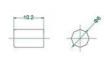




Triggerhead options 可选的扳机形状



Lockbutton options 可选的锁的形状











Product series: CHD MODEL 10



Function:

- Anti-tease contact system.
- DC On-Off.
- High voltage DC rating capable.
- Single pole double throw with brake.
- Double pole single throw function.

Terminals:

• 6.3x0.8mm Quick connect or solder terminals for connection.

端子:

一般的规格参数

• 瞬间过档的触点机构。

• 单极双掷带刹车功能。

• 双刀单掷功能。

• DC On/Off 开关。 • 高压DC功率开关。

产品功能:

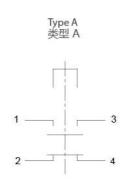
• 适合6.3x0.8mm的快插端子的接线方式。

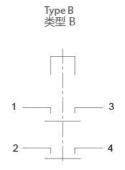
Applications:

• High power DC appliances such as Garden tools.

• 使用大功率的DC器具上,例如园林工具。

Circuit Diagram 原理图



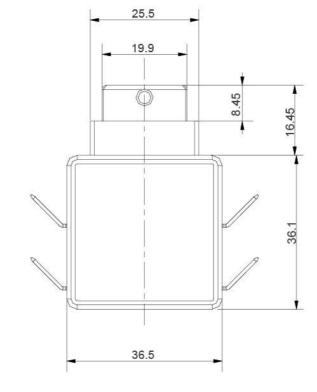


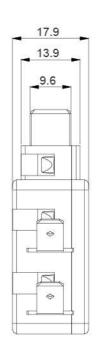
Approvals 安规认证

	Approbation:		
Models	c FII us	05	Cac
Mod:10	0~30A 24-60Vdc 0~25A 24-36Vdc	25A 36Vdc 30A 60Vdc	20A up to 30A 36Vdc 5E4 20A up to 30A 60Vdc 5E4

型号 10

Switch Base Shape (开关)本体形状







Product series: CDP

MODEL CDP

General Characteristics

Function:

- On-Off version.
- Single pole or double pole version.
- Momentary-On switch.
- Dust protected.
- Optional integrated holder for interference capacitors.

Terminals:

- · Screw terminals for supply cord.
- Push-in terminals for connection of internal wiring.

Applications:

 Class II appliances for instance High-power medium Angle grinder.

一般的规格参数

产品功能:

- On-Off 版本。
- 单极或者双极通断功能。
- 快速导通功能。
- 具有防尘功能。
- 外壳可以演变成满足安装不同尺寸的滤 波电容。

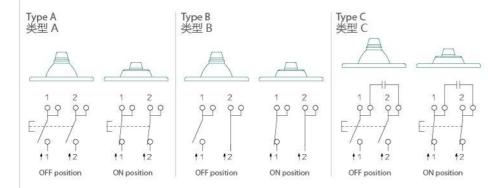
端子:

- 与电源端为螺丝端子接线方式。
- 与工具内部端为插线端子的接线方式。

应用:

• 使用在Ⅱ类器具上,例如大功率中型角磨机。

Circuit Diagram 原理图



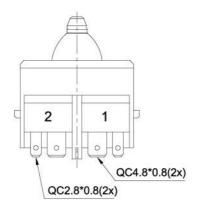
Approvals 安规认证

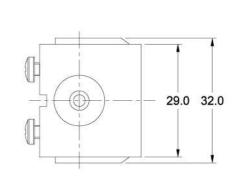
		Approbation:	
Models	c 711 us	05	Cec
Mod : CDP	35A 36Vd.c. 5E4	35A 36Vd.c. 5E4	N/A

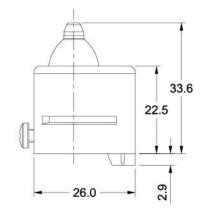
型号 CDP

Switch Base Shape (开关)本体形状

类型A ON/OFF功能 Type A ON/OFF Switch



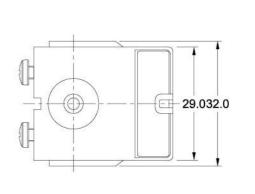


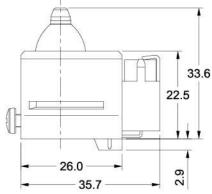




QC4.8*0.8(2x)

Type B ON/OFF Switch Interference capacitor







Product series: MCS

MODEL 02





General Characteristics

Function:

• Micro switch compact structure with a very short contact time

Short travel distance; small operation force High sensitivity snap action the ON / OFF switch

Features:

- Contact gap < 3mm or ≥3mm
- Wide range of operation force from 0.2~5N
- Can meet the 105 ° C environmental requirements
- Customized lever options
- Dustproof IP60

Type of terminals:

- · Various quick push-in terminals
- PCB terminals
- Solder terminals

Applications:

· "Widely used in home appliances, power tools, electronic equipment, antomation equipment, communication equipment, automo-tive electronics, instrumentation and other fields"

一般的规格参数

产品功能:

• 结构紧凑,微小触点间距,动作行程短,高灵 敏度快速通断的ON/OFF 开关

可选功能:

- 接触间距有小于3mm或者大于等于3mm种类
- •操作力范围可选择从0.2~5N
- 可满足105°C 的环境使用要求
- 可以依据客户需求定制多样化的驱动杆
- · 防尘等级IP60

端子类型:

- 多样的快插端子选择
- PCB插件端子
- 焊锡端子

应用:

"广泛应用于各种家用电器、电动工具、电子 设备、自动化设备、通讯设备、汽车电子、仪 器仪表等领域"

Circuit Diagram 原理图

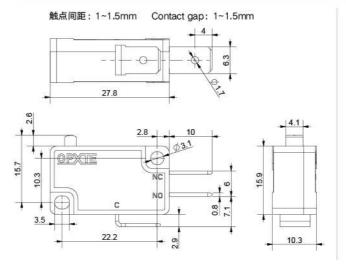


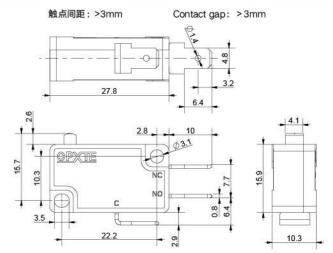
Approvals 安规认证

	Approbation:		
Models	c FL us	05	
Mod:02	0~16(10)A 127Vac T85/T105 5E4 0~16A 36Vd.c. T85/T105 5E4	4(4)A~16(4)A 127/250VacT85/T105 5E4 8A 36Vd.c.T85/T105 5E4 25.1(8)A 250Vac T85/T105 5E4 16(10)A 127/250Vac T85/T105 1E4 16A 36Vd.c.T85/T105 1E4	

型号 02

Switch Base Shape (开关)本体形状





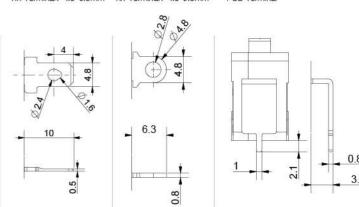
Terminal type 端子形态

快插端子: 4.8x0.8mm QC-Terminal 6.3*0.8mm QC-Terminal 4.8*0.8mm

快插端子: 4.8x0.5mm QC-Terminal 4.8*0.5mm

焊锡端子: 4.8x0.5mm Tin-Terminal: 4.8*0.5mm Tin-Terminal: 4.8*0.8mm

PCB-Terminal



Lever form压杆形态

Button form按钮形态



