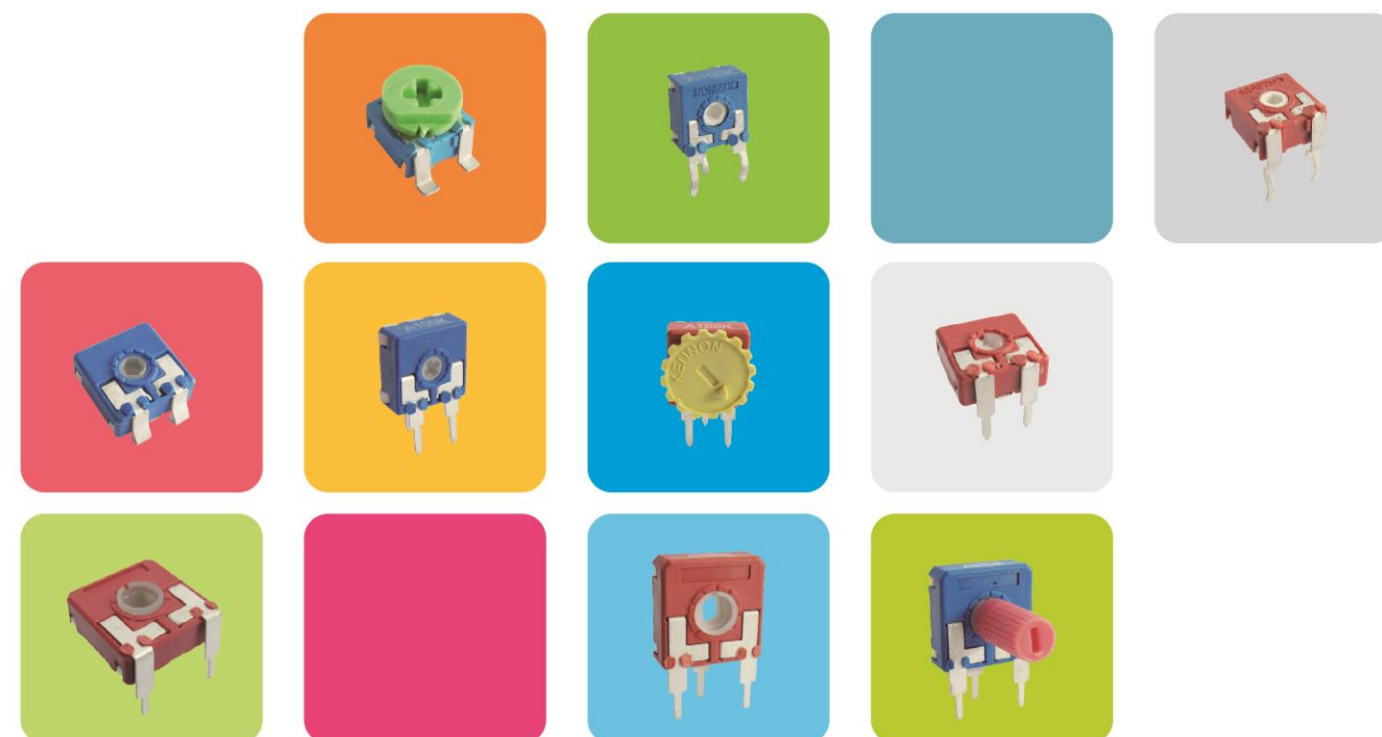




Kennon[®]
ISO9001 ISO14001

**TRIMMER
POTENTIOMETERS**
微调电位器
CA6 CA9 CA14



常州科能电子有限公司

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联系人(Contact Person):Ferry Tong (General Manager)

Http://www.czkennon.com

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常州科能电子有限公司

CHANGZHOU KENNON ELECTRONICS CO.,LTD.

[Http://www.czkennon.com](http://www.czkennon.com)

技术创新 信誉

TECHNOLOGY INNOVATION CREDIBILITY

常州科能电子有限公司是专业设计和制造开关和电位器的厂商，已有20年的制造经验。公司占地面积25000平方米，厂房建筑面积15000平方米，公司产品现有50多个系列，800多种规格。产品远销欧洲、美洲、亚洲、中东等地区，在国内外市场均有相当的占有率，主要客户均为国内、国际一流品牌。

常州科能电子有限公司已通过ISO9001:2000质量管理体系。相关大功率电位器和开关，均已通过美国的UL，德国的VDE,挪威的NEMKO和国际电工委员会（IECEE）的CB等认证，生产的产品符合ROHS等欧洲环保标准。

常州科能电子有限公司拥有强大的技术和管理团队，先进的生产工艺、专业设备，系统的质控体系。完全具有大规模生产配套服务的能力。

公司以“质量第一、合理价格、交货快捷、服务优良”为宗旨。携手所有合作伙伴，共同发展，共同进步。

Changzhou Kennon Electronics Co., Ltd. is a professional manufacturers which design and manufacture switches and potentiometers, has 20 years of experience in manufacturing. The company covers an area of 25000 square meters, plant construction area of 15000 square meters, existing products more than 50 series, more than 800 kinds of specifications. Products are exported to Europe, America, Asia, the Middle East and other regions. Our product is very popular around the world, main customer are all from domestic and international and most of them are first-class brand customer.

Changzhou Kennon electronics Limited company has passed ISO9001:2000. The dimmer potentiometers and switches, has passed UL, VDE, NEMKO and the International Electro technical Commission (IECEE) of the CB, products meet European environmental standards ROHS,Reach etc..

Changzhou Kennon Electronics Co., has a strong technical and management team, professional production technology, advanced equipment and quality control system. Capable cooperate with large company with mass production. With the purpose of quality first, reasonable price, fast delivery, excellent service, we will work with our all partner hand in hand, common development, and common progress.



TRIMMER POTENTIOMETER



CA6

CA6 6mm Carbon Potentiometer



特点

- 长寿命，低成本。
- 优良的防尘结构 没有任何开口部分。
- 力矩小。
- 阻值线性多样化。
- 旋转50%处有定位或整个旋转行程带定位。
- 品种规格多 适用性强

FEATURES

- Carbon resistive element.
- Dust proof enclosure.
- Polyester substrate.
- Also upon request:
 - ◇ Wiper positioned at 50% or fully clockwise.
 - ◇ Supplied in magazines for automatic insertion.
 - ◇ Long life model CA-6...E(10000 cycles)
 - ◇ Housing available in self extinguishable plastic (UL94V0)

机械性能

MECHANICAL SPECIFICATIONS

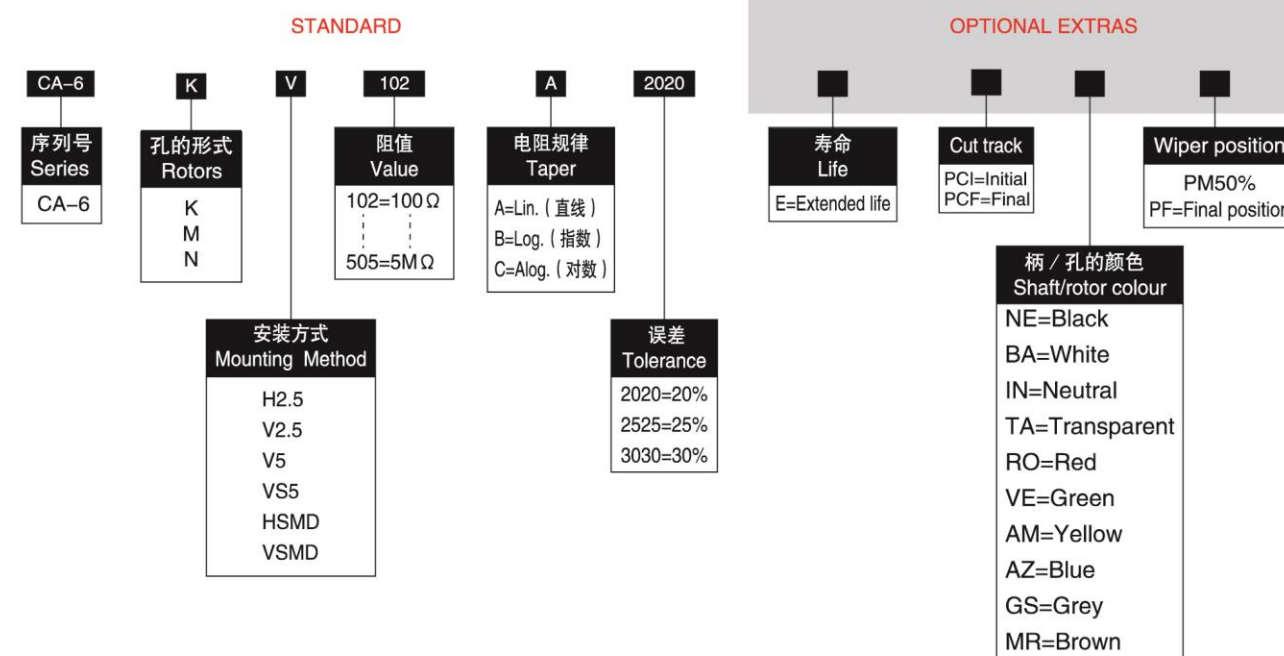
- 机械 —Mechanical
 - 旋转角度 rotation angle:235° ±10°
- 电气 —Electrical
 - 旋转角度 rotation angle:215° ±20°
- 旋转力矩 —Torque: < 2Ncm.
- 止档强度 —Stop torque:4Ncm

电器性能

ELECTRICAL SPECIFICATIONS

- 阻值范围 Range of values: 100Ω ≤ Rn ≤ 5M (Through-Hole)
100Ω ≤ Rn ≤ 1M (SMD)
- 阻值误差 —Tolerance: 100Ω ≤ Rn ≤ 1M --- ± 20% (Through-Hole)
1M ≤ Rn ≤ 5M --- ± 30% (Through-Hole)
100Ω ≤ Rn ≤ 1M --- ± 25% (SMD)
- 耐电压 —Max. Voltage:100VDC(lin),60VDC(no lin)
- 额定功率 —Nominal Power 40℃ 0.1W(lin) 0.06W(no lin)
- 线性 —Taper:Lin(A);Log(B);Antilog(C)
- 残留电阻 —Residual resisance:Lin,Log,Antilog ≤ 5*10⁻³Rn
- 平滑行 —Equivalent Noise Resisance: ≤ 3%Rn
- 环境温度 —Operating Temperature:-25℃+70℃

型号命名 HOW TO ORDER





TRIMMER POTENTIOMETER

CA6

HOW TO ORDER CUSTOM DRAWING

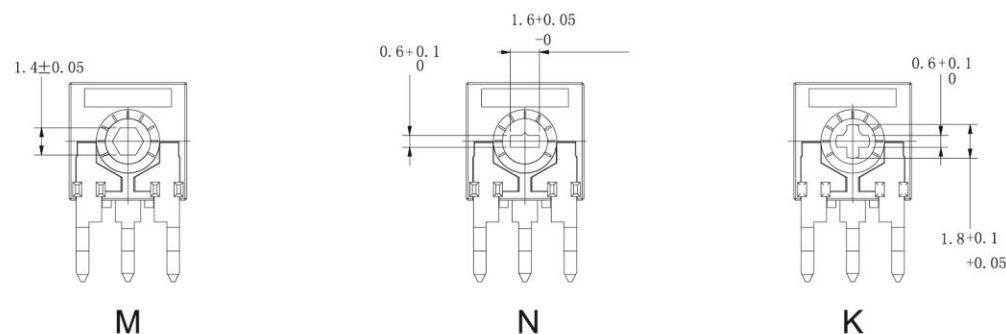
CA-6 KV + DRAWING NUMBER (Max.16 characters)

This way of ordering should be used for options which are not included in the "How to order" standard and optional extras

STANDARD OPTIONS

- Long life10000 cycles
- Packing.....Bulk
- Rotor colour.....White
- Wiper positionInitial
- CrimpingWith crimping

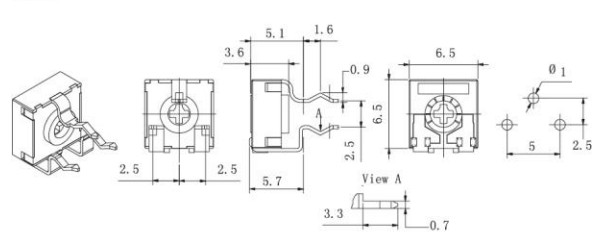
ROTORS (孔的形式)



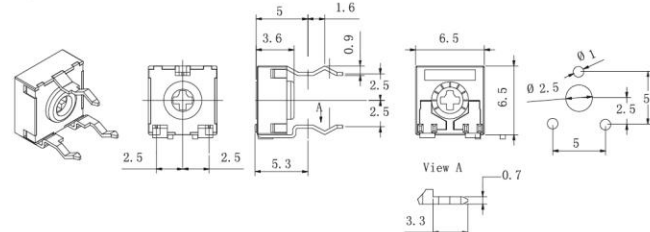
MOUNTING METHODS (安装方式)

V=Horizontal mount/vertical adjust 卧式-垂直调节

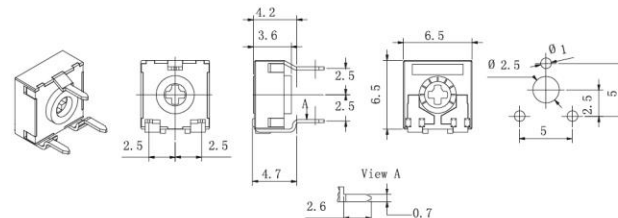
V2.5



V5

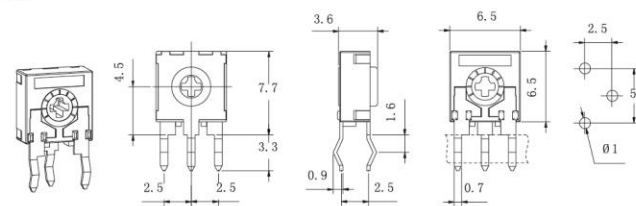


VS5



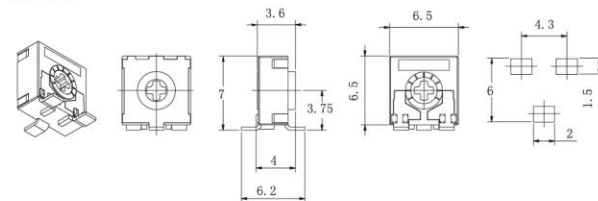
H=Vertical mount/Horizontal adjust 立式-水平调节

H2.5

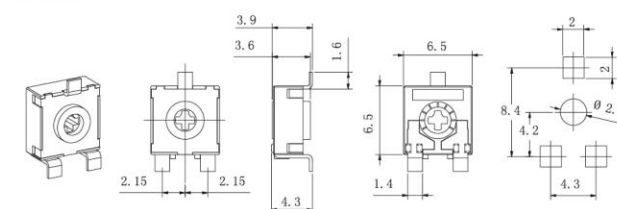


SMD version 贴片安装

HSMD



VSMD



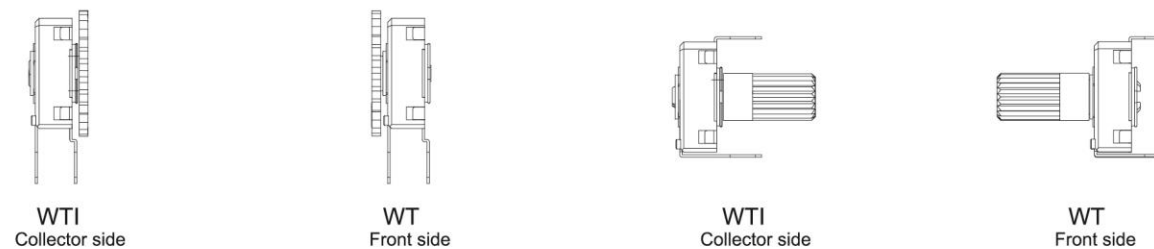
TRIMMER POTENTIOMETER



CA6

Adjustment possibilities (手柄安装方式)

Potentiometers can be adjusted through either the front side (WT) or the collector side (WTI): 电位器手柄可以插入电位器正面或者背面调节

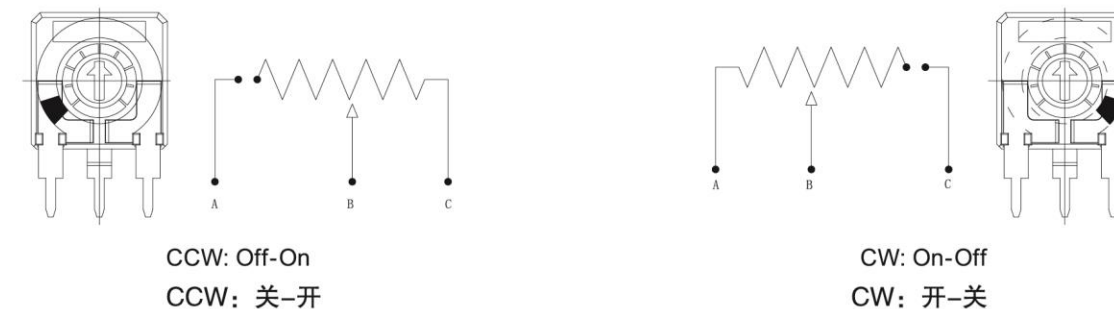


Potentiometers with cut track (电位器带开关功能)

Recommended for lighting regulation. (推荐使用领域为灯光调节)

With cut at the beginning of the track CCW:off-on. (开关在电阻的起始位置, CCW: 关-开)

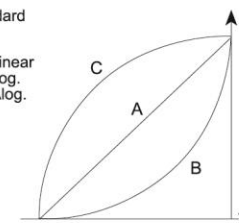
With cut at the end of track-CW:on-off. Others positions available on request. (开关在电阻的末端位置, CW, 开-关。其他可根据要求定制)



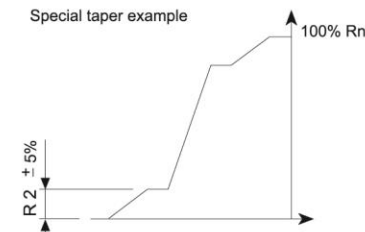
TAPERS

Standard

A = Linear
B = Log.
C = Alog.

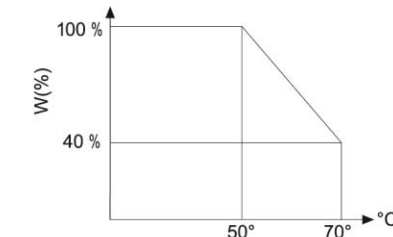


Special taper example



NOTE = Please note relative terminals positions when ordering non linear tapers.

POWER RATING CURVE



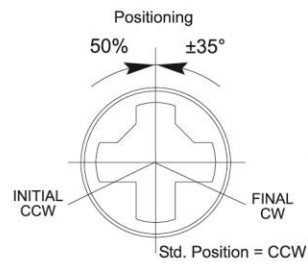


TRIMMER POTENTIOMETER

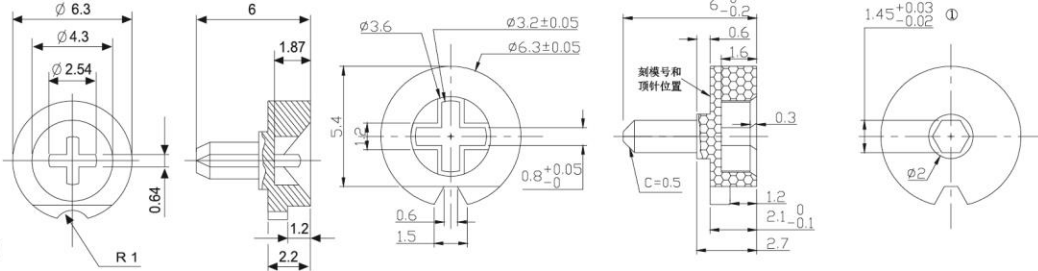
CA6

SHAFT 手柄

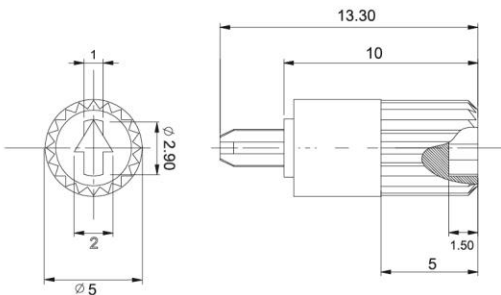
3#



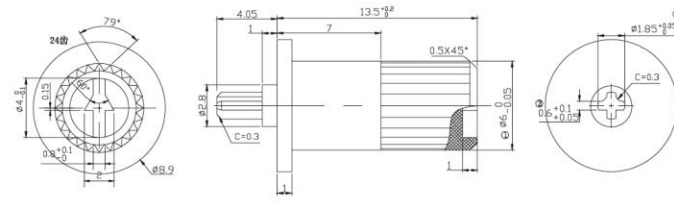
4#



5V



6V



Please order Shaft Separately

TESTS

ELECTRICAL LIFE	1.000h @ 50°C:0.1W	± 5%
MECHANICAL LIFE(CYCLES)	200 @ 10CPM...15CPM	± 3% (Rn<1M Ω)
TEMPERATURE COEFFICIENT	-25°C; +70°C	± 300ppm(Rn<100K)
THERMAL CYCLING	16h. @ 85°C; 2h. @ -25°C	± 2.5%
DAMP HEAT	500h. @ 40°C @ 95%HR	± 5%
VIBRATION (for each plane X,Y,Z)	2h. @ 10Hz... 55Hz.	± 2%

NOTE: Out of range values may not comply with these results.

TRIMMER POTENTIOMETER



CA9

CA9 9mm Carbon Potentiometer



特点

- 长寿命, 低成本。
- 优良的防尘结构 没有任何开口部分。
- 力矩小。
- 阻值线性多样化。
- 旋转50%处有定位或整个旋转行程带定位。
- 品种规格多 适用性强

FEATURES

- Carbon resistive element.
- Dust proof enclosure.
- Polyester substrate.
- Also upon request:
 - ◇ Wiper positioned at 50% or fully clockwise.
 - ◇ Supplied in magazines for automatic insertion.
 - ◇ Long life model CA-9...E(10000 cycles)
 - ◇ Housing available in self extinguishable plastic (UL94V0)

机械性能

MECHANICAL SPECIFICATIONS

- 机械 —Mechanical
 - 旋转角度 rotation angle: 240° ± 5°
- 电气 —Electrical
 - 旋转角度 rotation angle: 220° ± 20°
- 旋转力矩 —Torque: < 2Ncm.
- 止档强度 —Stop torque: 5Ncm

电器性能

ELECTRICAL SPECIFICATIONS

- 阻值范围 Range of values: 100 Ω ≤ Rn ≤ 5M
- 阻值误差 —Tolerance: 100 Ω ≤ Rn ≤ 1M --- ± 20%
1M ≤ Rn ≤ 5M --- ± 30%
- 耐电压 —Max. Voltage: 200VDC(lin), 150VDC(no lin)
- 额定功率 —Nominal Power 40°C 0.15W(lin) 0.10W(no lin)
- 线性 —Taper: Lin(A); Log(B); Antilog(C)
- 残留电阻 —Residual resistance: Lin, Log, Antilog ≤ 5*10⁻³Rn
- 平滑行 —Equivalent Noise Resistance: ≤ 3%Rn
- 环境温度 —Operating Temperature: -25°C + 70°C

型号命名

HOW TO ORDER

STANDARD		OPTIONAL EXTRAS							
CA-9	L	V	102	A	2020	寿命	Cut track	Detent	Wiper position
序列号 Series	孔的形式 Rotors	阻值 Value	电阻规律 Taper	误差 Tolerance	寿命 Life	寿命 Life	Cut track	Detent	Wiper position
CA-9	L LA K Y D M MA MT G	102=100Ω 505=5M	A=Lin. (直线) B=Log. (指数) C=Alg. (对数)	2020=20% 3030=30%	E=Extended life	See PT's with detents data sheet	PM50% PF=Final position	柄 / 孔的颜色 Shaft/rotor colour	
		安装方式 Mounting Method						NE=Black BA=White IN=Neutral TA=Transparent RO=Red VE=Green AM=Yellow AZ=Blue GS=Grey MR=Brown	
		H2.5 H3.8 H5 HS3.8 V7.5 V10 VR10 MAV10 MTV10 HSM D VSM D							



CA9

TRIMMER POTENTIOMETER

HOW TO ORDER CUSTOM DRAWING

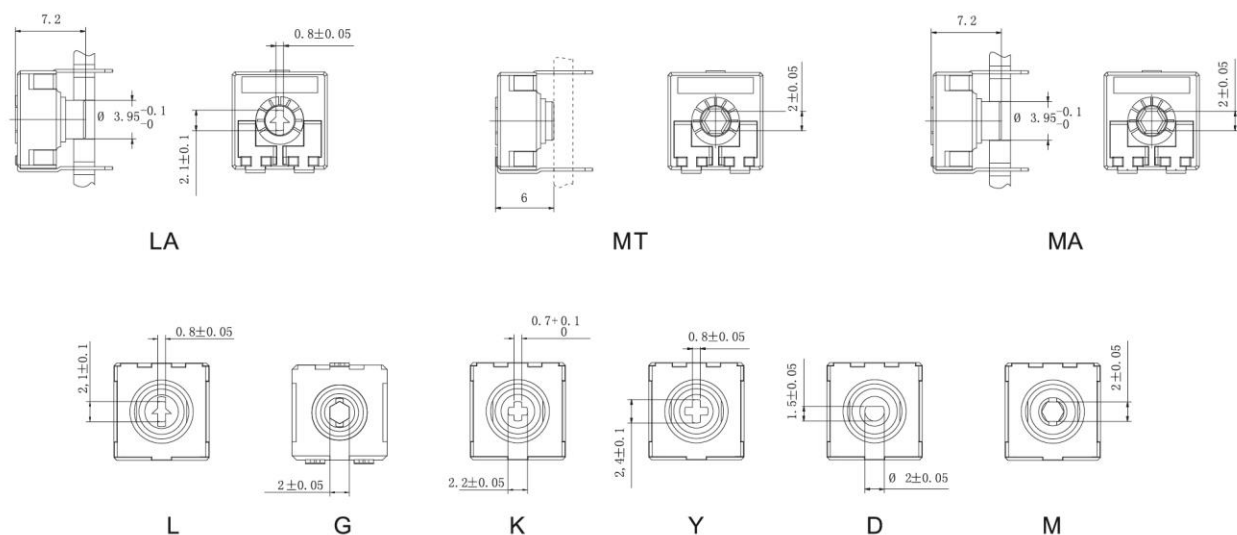
CA9 KV + DRAWING NUMBER (Max.16 characters)

This way of ordering should be used for options which are not included in the "How to order" standard and optional extras

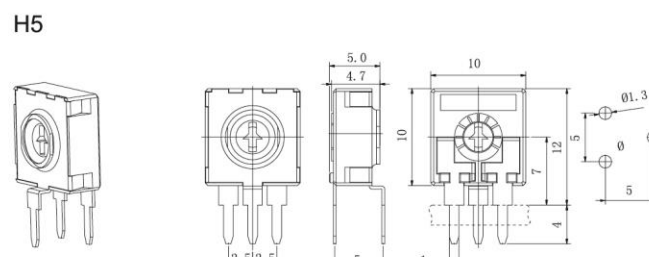
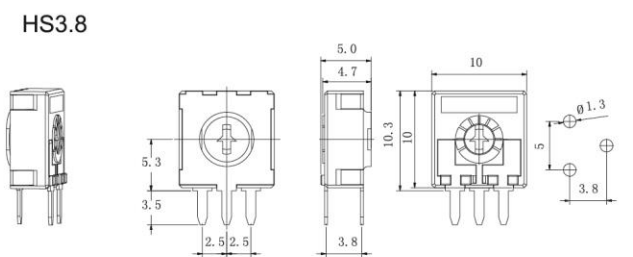
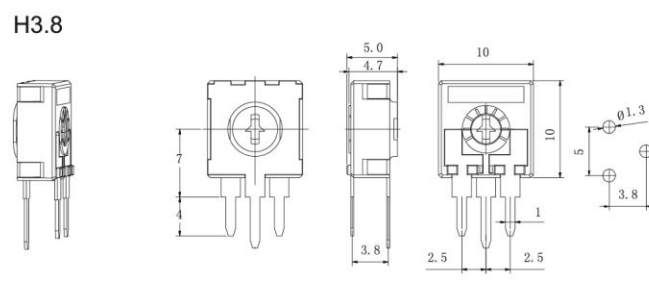
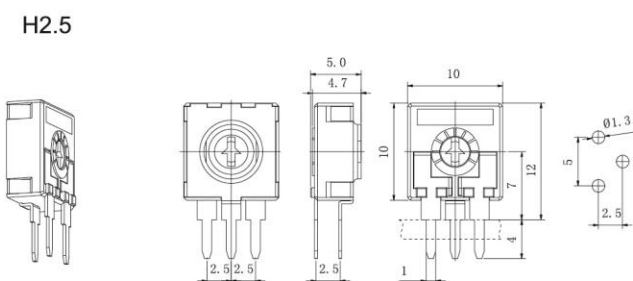
STANDARD OPTIONS

- Long life10000 cycles
- Packing.....Bulk
- Rotor colour.....White
- Wiper positionInitial
- CrimpingWith crimping

ROTORS (孔的形式)



MOUNTING METHODS (安装方式)

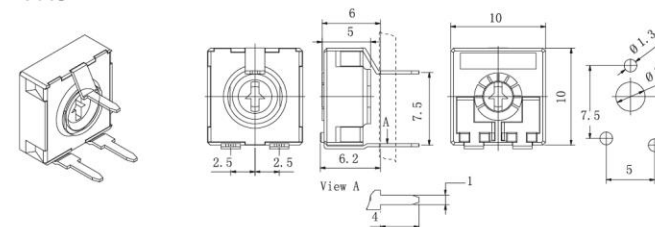


TRIMMER POTENTIOMETER

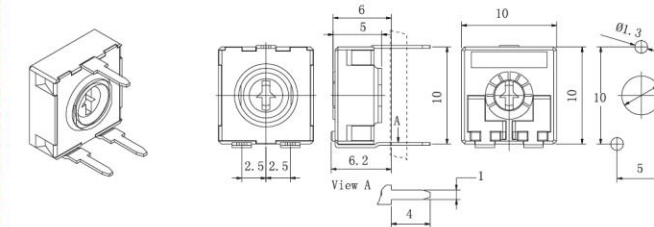


CA9

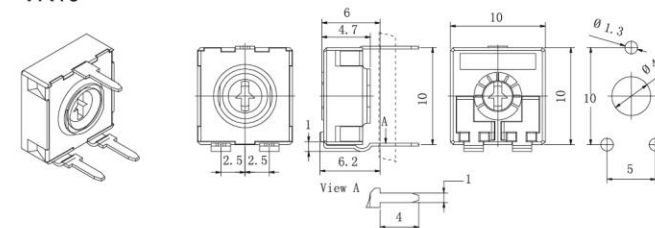
V7.5



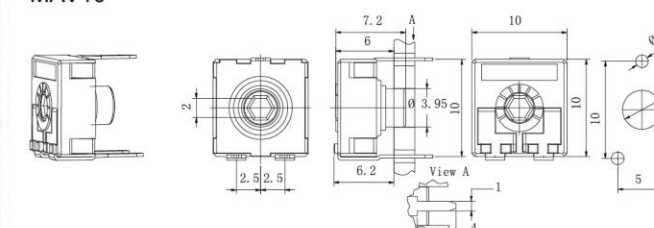
V10



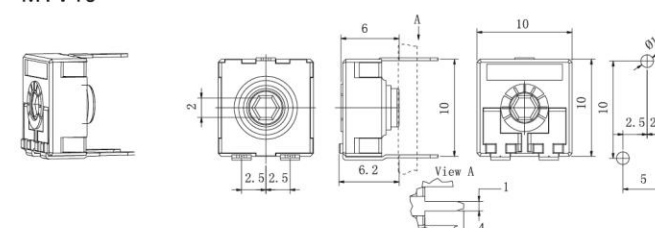
VR10



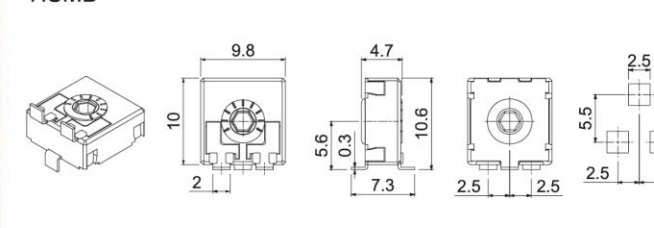
MAV10



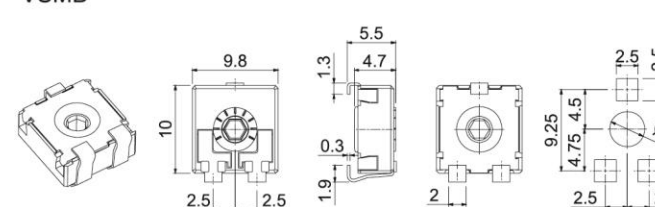
MTV10



HSMD

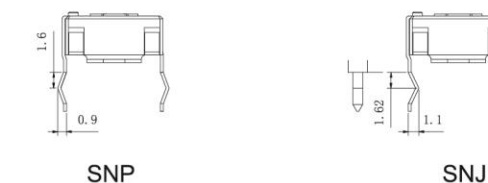


VSMD



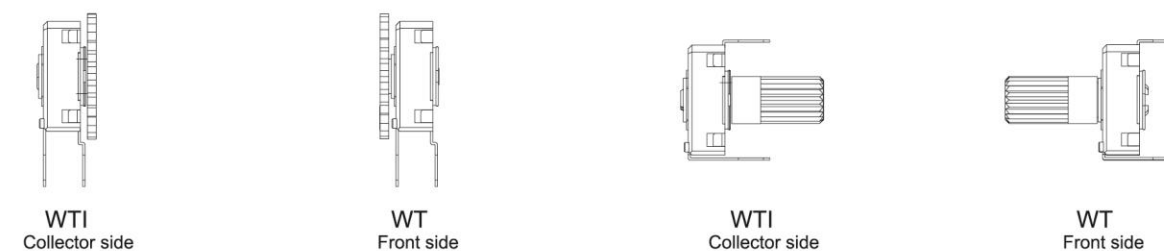
Terminals (焊脚种类)

We can provide crimped terminals (with "snap in"), to better hold the component to the board prior to soldering.
我们可以提供打弯式的焊脚，以便在焊接前能够更好的安装在PCB板上



Adjustment possibilities (手柄安装方式)

Potentiometers can be adjusted through either the front side (WT) or the collector side (WTI):
电位器手柄可以插入电位器正面或者背面调节



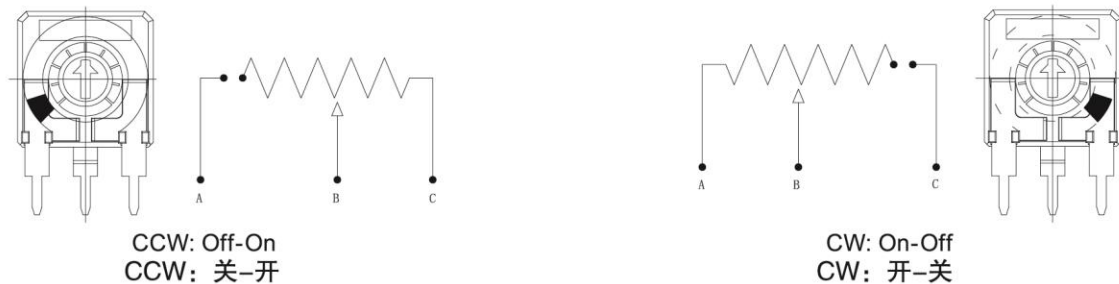


TRIMMER POTENTIOMETER

CA9

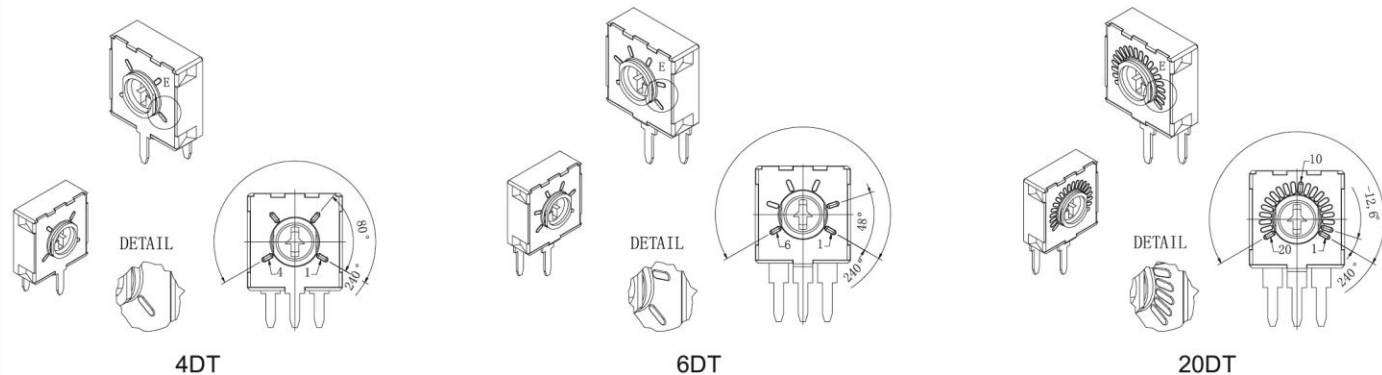
Potentiometers with cut track 电位器带开关功能

Recommended for lighting regulation. (推荐使用领域为灯光调节)
 With cut at the beginning of the track CCW:off-on. (开关在电阻的起始位置, CCW: 关-开)
 With cut at the end of track-CW:on-off. Others positions available on request.
 (开关在电阻的末端位置, CW, 开-关。其他可根据要求定制)

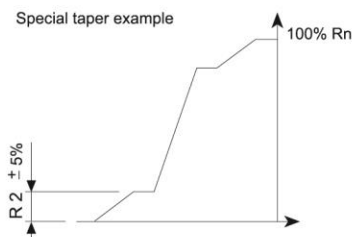
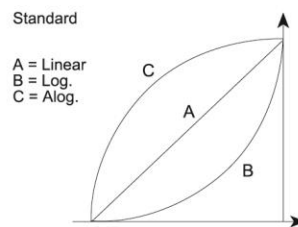


Potentiometers with detents (电位器带定位功能)

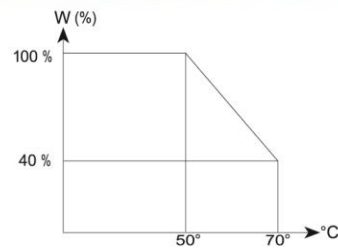
Detent feature(DT) is specially for control application. Detents can be 3,4,6,7,9,10 and up to 20.
 带定位的产品可适用于控制设备, 定位次数可以为3, 4, 6, 7, 9, 10...最高可达20次定位。



TAPERS



POWER RATING CURVE



NOTE = Please note relative terminals positions when ordering non linear tapers.

TESTS

ELECTRICAL LIFE	1.000h @ 50°C;0.15W	± 5%
MECHANICAL LIFE(CYCLES)	500 @ 10CPM...15CPM	± 3% (Rn<1M Ω)
TEMPERATURE COEFFICIENT	-25°C; +70°C	± 300ppm(Rn<100K)
THERMAL CYCLING	16h. @ 85°C;2h. @ -25°C	± 2.5%
DAMP HEAT	500h. @ 40°C @95%HR	± 5%
VIBRATION (for each plane X,Y,Z)	2h. @ 10Hz... 55Hz.	± 2%

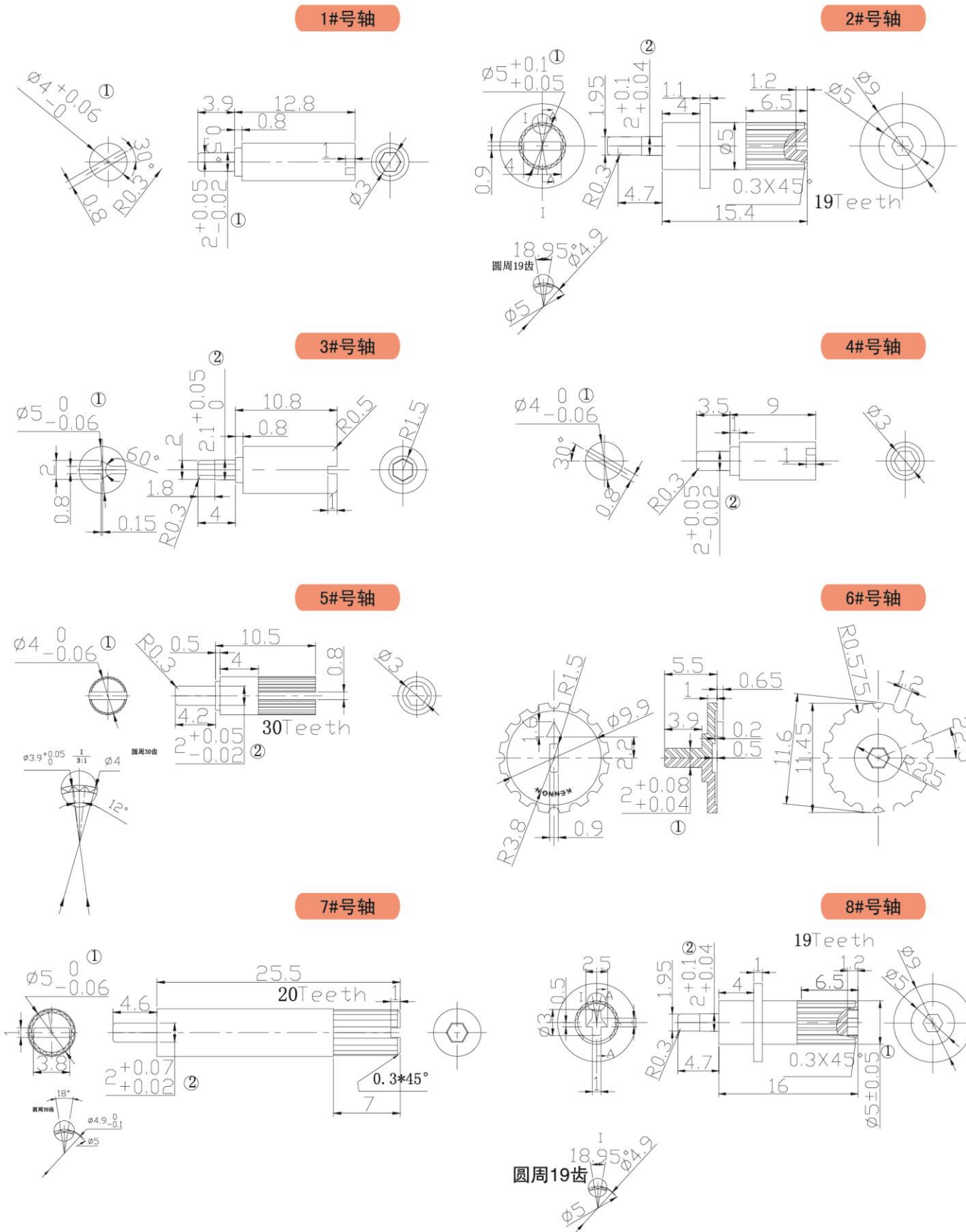
NOTE:Out of range values may not comply with these results.

TRIMMER POTENTIOMETER



CA9

Shaft type





CA14

TRIMMER POTENTIOMETER

CA14 14mm Carbon Potentiometer



特点

- 长寿命, 低成本。
- 优良的防尘结构 没有任何开口部分。
- 力矩小。
- 阻值线性多样化。
- 旋转50%处有定位或整个旋转行程带定位。
- 品种规格多 适用性强

FEATURES

- Carbon resistive element.
- Dust proof enclosure.
- Polyester substrate.
- Also upon request:
 - ◇ Wiper positioned at 50% or fully clockwise.
 - ◇ Supplied in magazines for automatic insertion.
 - ◇ Long life model CA-14...E(10000 cycles)
 - ◇ Housing available in self extinguishable plastic (UL94V0)

机械性能 MECHANICAL SPECIFICATIONS

- 机械 —Mechanical
 - 旋转角度 rotation angle: $265^\circ \pm 5^\circ$
- 电气 —Electrical
 - 旋转角度 rotation angle: $245^\circ \pm 20^\circ$
- 旋转力矩 —Torque: $< 2.5\text{Ncm}$.
- 止档强度 —Stop torque: 10Ncm

电器性能 ELECTRICAL SPECIFICATIONS

- 阻值范围 Range of values: $100\Omega \leq R_n \leq 5\text{M}$
- 阻值误差 —Tolerance: $100\Omega \leq R_n \leq 1\text{M} \text{---} \pm 20\%$
 $1\text{M} \leq R_n \leq 5\text{M} \text{---} \pm 30\%$
- 耐电压 —Max. Voltage: $250\text{VDC}(\text{lin}), 200\text{VDC}(\text{no lin})$
- 额定功率 —Nominal Power 40°C $0.25\text{W}(\text{lin}) 0.13\text{W}(\text{no lin})$
- 线性 —Taper: Lin(A); Log(B); Antilog(C)
- 残留电阻 —Residual resistance: Lin, Log, Antilog $\leq 5 \cdot 10^{-3} R_n$
- 平滑性 —Equivalent Noise Resistance: $\leq 3\% R_n$
- 环境温度 —Operating Temperature: $-25^\circ\text{C} \sim +70^\circ\text{C}$

型号命名 HOW TO ORDER

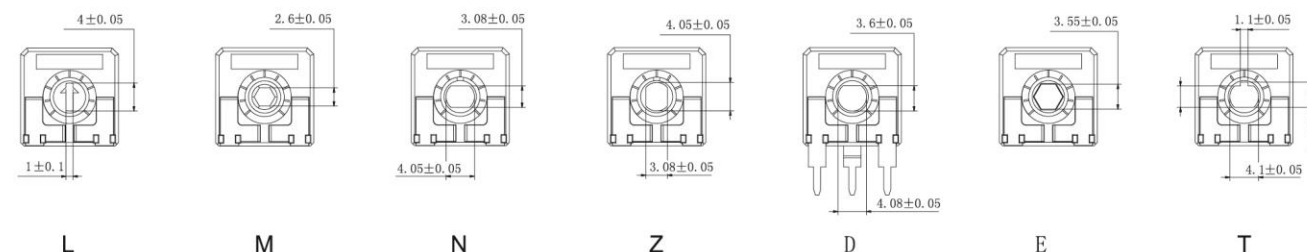
STANDARD				OPTIONAL EXTRAS			
CA-14	L	V	102	A	2020		
序列号 Series	孔的形式 Rotors	阻值 Value	电阻规律 Taper	寿命 Life	Cut track	Detent	Wiper position
CA-14	L M N Z E T	102=100Ω 505=5M	A=Lin. (直线) B=Log. (指数) C=Alg. (对数)	E=Extended life	PCI=Initial PCF=Final	See PT's with detents data sheet	PM50% PF=Final position
		安装方式 Mounting Method	误差 Tolerance	柄 / 孔的颜色 Shaft/rotor colour			
		H0, HC0 H2.5, H4 H5, HA5 HL5, V12.5 VA12.5, VL12.5 VR12.5, VD11 VD7.5, V15 V17.5, V15...CFF HSMD VSMD	2020=20% 3030=30%	NE=Black BA=White IN=Neutral TA=Transparent RO=Red VE=Green AM=Yellow AZ=Blue GS=Grey MR=Brown			

TRIMMER POTENTIOMETER

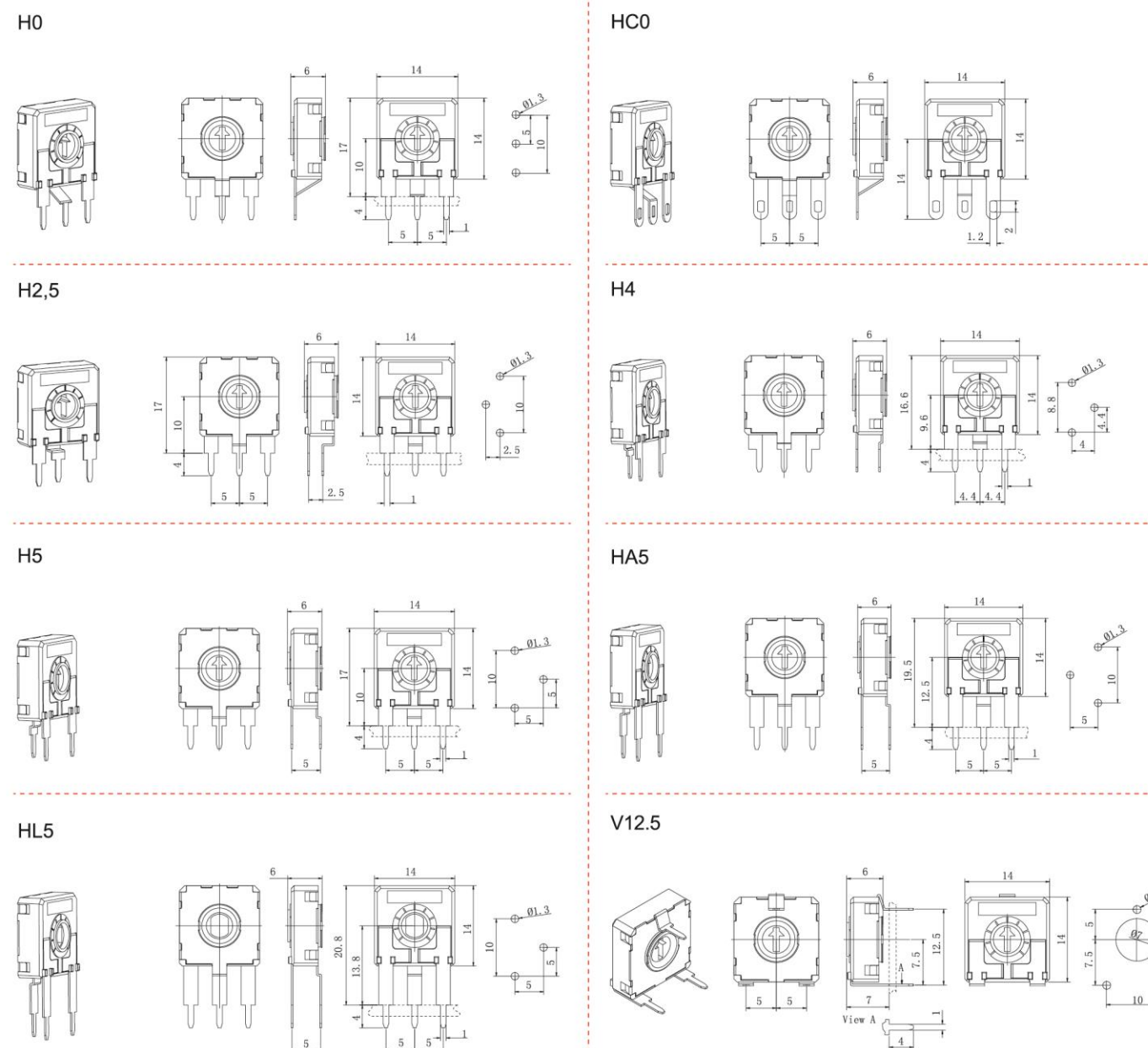


CA14

ROTORS (孔的形式)



MOUNTING METHODS (安装方式)

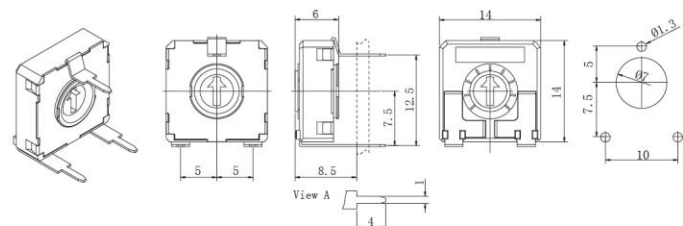




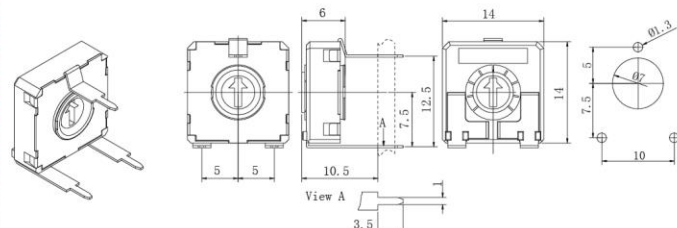
CA14

TRIMMER POTENTIOMETER

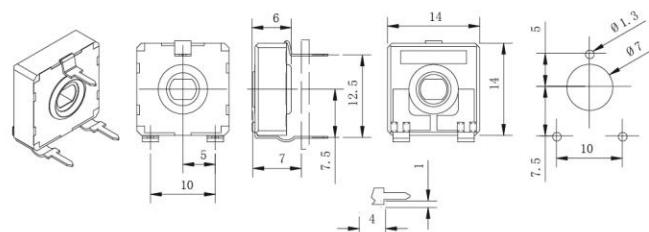
VA12.5



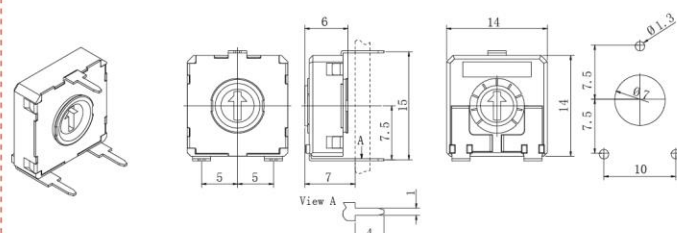
VL12.5



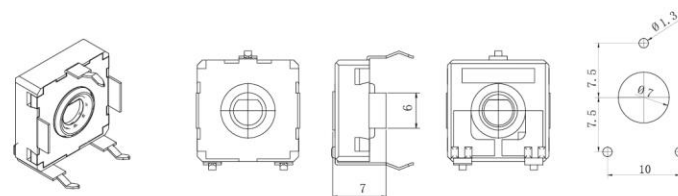
VR12.5



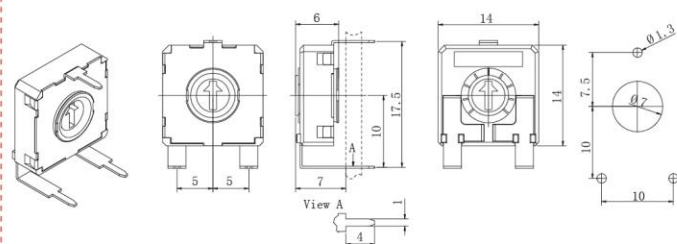
V15



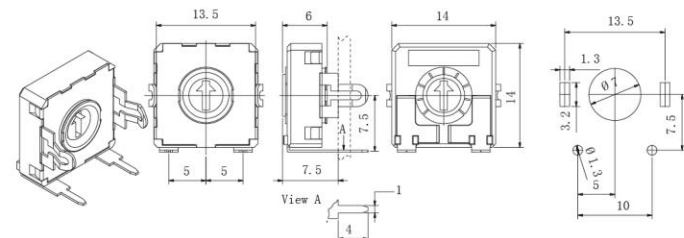
V15...CFF



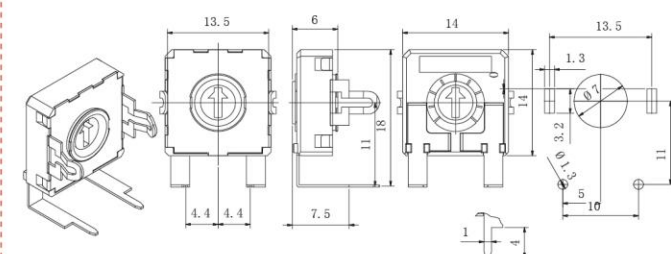
V17.5



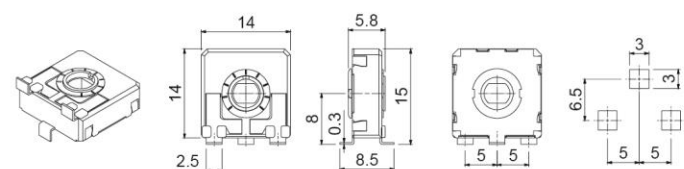
VD7.5



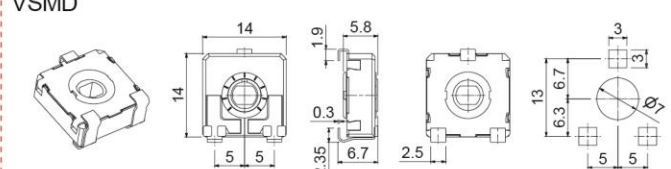
VD11



HSMD



VSMD



TRIMMER POTENTIOMETER

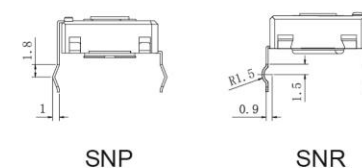


CA14

Terminals (焊脚种类)

We can provide crimped terminals (with "snap in"), to better hold the component to the board prior to soldering.

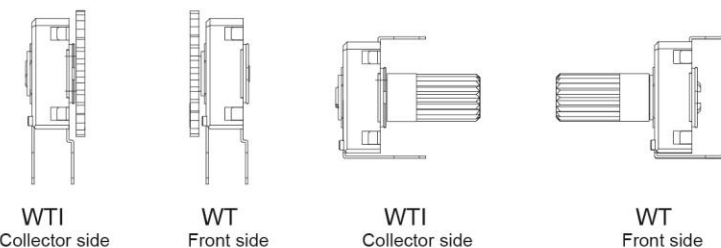
我们可以提供打弯式的焊脚，以便在焊接前能够更好的安装在PCB板上



Adjustment possibilities (手柄安装方式)

Potentiometers can be adjusted through either the front side (WT) or the collector side (WTI):

电位器手柄可以插入电位器正面或者背面调节



Potentiometers with cut track 电位器带开关功能

Recommended for lighting regulation. (推荐使用领域为灯光调节)

With cut at the beginning of the track CCW:off-on. (开关在电阻的起始位置, CCW: 关-开)

With cut at the end of track-CW:on-off. Others positions available on request.

(开关在电阻的末端位置, CW, 开-关。其他可根据要求定制)



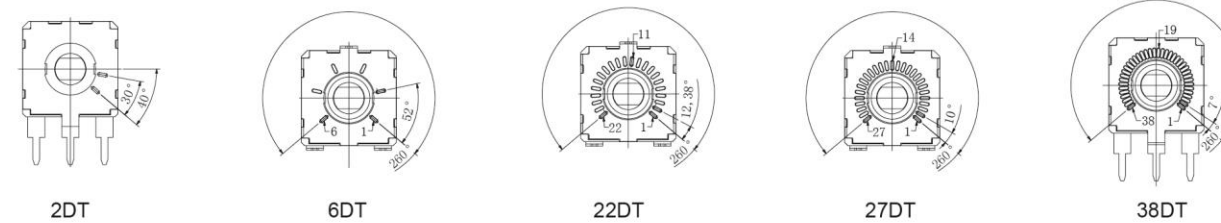
CCW: Off-On
CCW: 关-开

CW: On-Off
CW: 开-关

Potentiometers with detents (电位器带定位功能)

Detent feature(DT) is specially for control application. Detents can be 2,6,22,27 and up to 38.

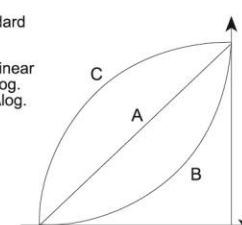
带定位的产品可适用于控制设备, 定位次数可以为2, 6, 22, 27最高可达38次定位。



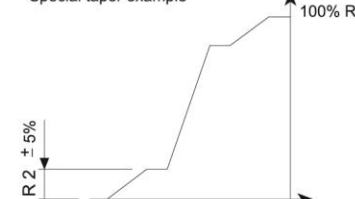
TAPERS

Standard

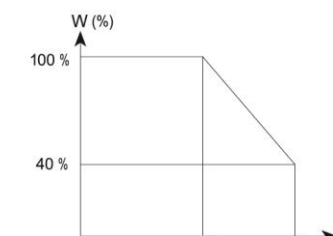
A = Linear
B = Log.
C = Alog.



Special taper example



POWER RATING CURVE



NOTE = Please note relative terminals positions when ordering non linear tapers.



CA14

TRIMMER POTENTIOMETER

TRIMMER POTENTIOMETER

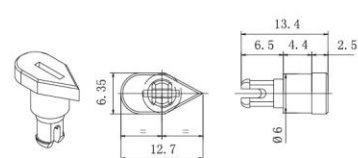


TESTS

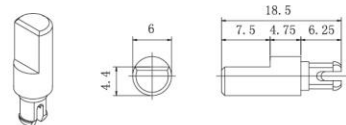
ELECTRICAL LIFE	1.000h @ 50°C;0.15W	± 5%
MECHANICAL LIFE(CYCLES)	500 @ 10CPM...15CPM	± 3% (Rn<1M Ω)
TEMPERATURE COEFFICIENT	-25°C; +70°C	± 300ppm(Rn<100K)
THERMAL CYCLING	16h.@ 85°C;2h.@ -25°C	± 2.5%
DAMP HEAT	500h.@ 40°C @95%HR	± 5%
VIBRATION (for each plane X,Y,Z)	2h.@10Hz... 55Hz.	± 2%

NOTE:Out of range values may not comply with these results.

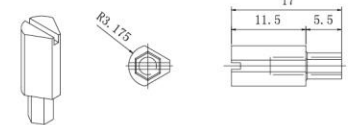
SHAFT TYPE 手柄种类



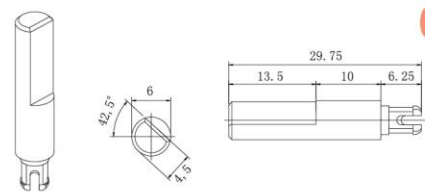
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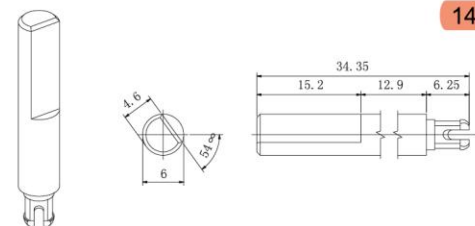
14056



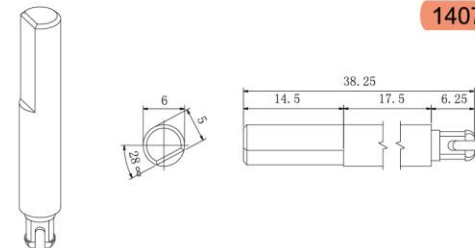
14065



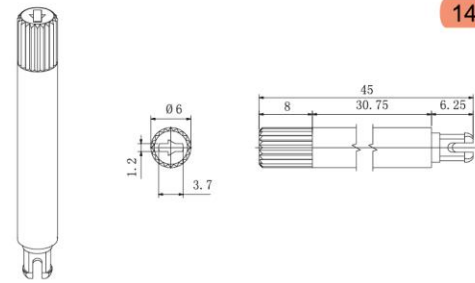
14066



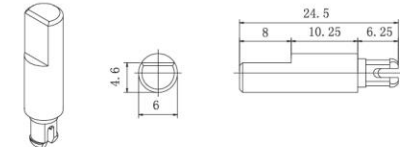
14067



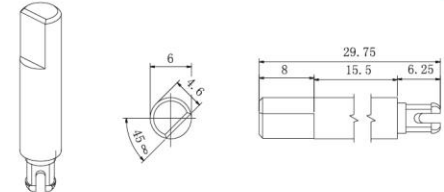
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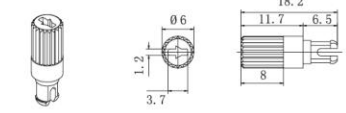
14073



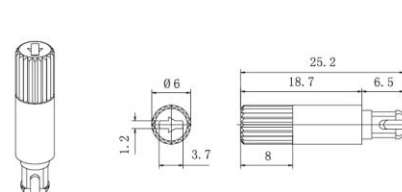
14081



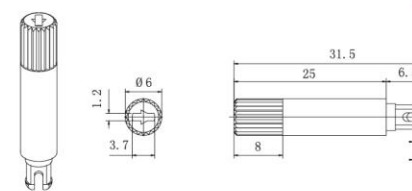
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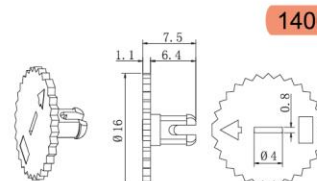
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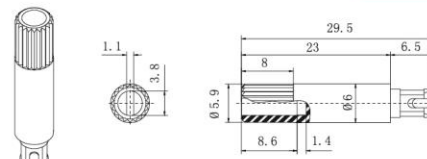
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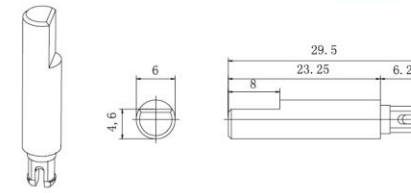
14250



14003



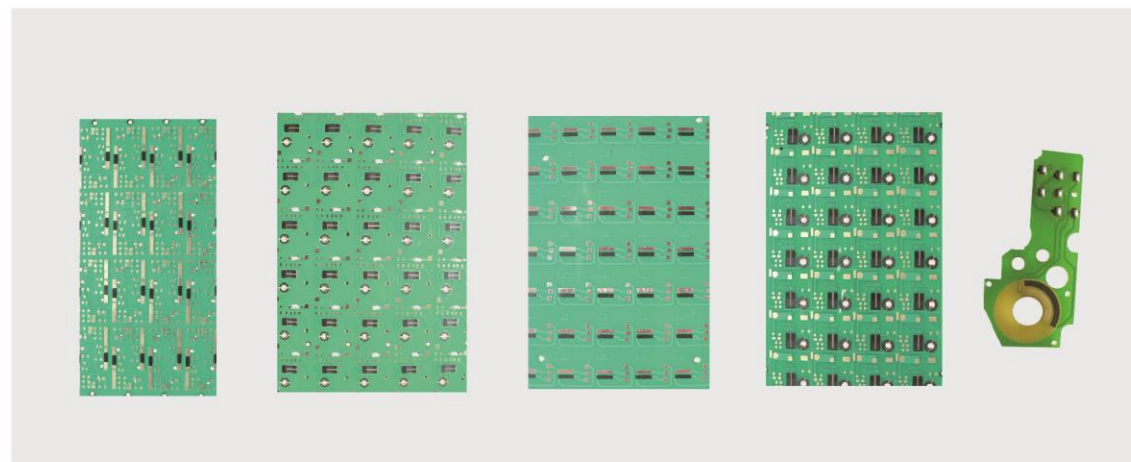
14008



14015

PCB board Resistor printed (线路板电阻体印刷)

可提供来料加工, 根据客户的要求定制各种形状的电阻体
Provides processing, according to customer requirements of a variety of customized resistance body shape



Automatic production line 全自动生产线



Laser marking machine 全自动激光打标机

