TRIMMER POTENTIOMETER

CA9 9mm Carbon Potentiometer

**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)

**MECHANICAL SPECIFICATIONS**
- **Mechanical**
  - Rotation angle: 240° ± 5°
- **Electrical**
  - Rotation angle: 220° ± 20°
  - Torque: < 2Ncm.
  - Stop torque: 5Ncm

**ELECTRICAL SPECIFICATIONS**
- **Range of values:**
  - 100 Ω ≤ Rn ≤ 5M
- **Tolerance:** 100 Ω ≤ Rn ≤ 1M —— ± 20%
  - 1M ≤ Rn ≤ 5M —— ± 30%
- **Max. Voltage:** 200VDC (lin), 150VDC (no lin)
- **Nominal Power:** 40°C 0.15W (lin) 0.10W (no lin)
- **Taper:** Lin(A); Log(B); AntiLog(C)
- **Residual resistance:** Lin, Log, AntiLog ≤ 5×10⁻³ Rn
- **Equivalent Noise Resistance:** ≤ 3% Rn
- **Operating Temperature:** −25°C to 70°C

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>Series</th>
<th>L</th>
<th>V</th>
<th>Taper</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA9</td>
<td>L</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**STANDARD**
- **Value:** 102×100 Ω
  - 505×5M

**Taper**
- A=Lin; B=Log; C=Alog

**Mounting Method**
- H2.5, H3.8, H5, HS3.8, V7.5, V10, VR10, MAV10, MTV10, HSMD, VSMD

**OPTIONAL extras**
- Life
- Cut track
- Detent
- Wiper position
- Shaft/rotor colour

- NE=Black
- BA=White
- IN=Neutral
- TA=Transparent
- RO=Red
- VE=Green
- AM=Yellow
- AZ=Blue
- GS=Grey
- MR=Brown
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 life: 10000 cycles
- Packing: Bulk
- Rotor colour: White
- Wiper position: Initial
- Crimping: With crimping

ROTORS （孔的形式）

LA  MT  MA

L  G  K  Y  D  M

MOUNTING METHODS （安装方式）

H2.5

H3.8

HS3.8

H5
TRIMMER POTENTIOMETER

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

WTI
Collector side

WT
Front side

WTI
Collector side

WT
Front side
**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**

Standard
A = Linear
B = Log.
C = Alg.

Special taper example

**POWER RATING CURVE**

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

**TESTS**

<table>
<thead>
<tr>
<th>ELECTRICAL LIFE</th>
<th>1,000h @ 50°C; 0.15W</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECHANICAL LIFE (CYCLES)</td>
<td>500 @ 10CPRM...15CPRM</td>
</tr>
<tr>
<td>TEMPERATURE COEFFICIENT</td>
<td>-25°C...+70°C</td>
</tr>
<tr>
<td>THERMAL CYCLING</td>
<td>16h. @ 85°C; 2hr. @ -25°C</td>
</tr>
<tr>
<td>DAMP HEAT</td>
<td>500h. @ 40°C @ 95% HR</td>
</tr>
<tr>
<td>VIBRATION (for each plane X, Y, Z)</td>
<td>2hr. @ 10Hz...55Hz</td>
</tr>
</tbody>
</table>

± 5%
± 3% (Rn<1M Ω)
± 300ppm (Rn<100K)
± 2.5%
± 5%
± 2%

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

1#号轴

2#号轴

3#号轴

4#号轴

5#号轴

6#号轴

7#号轴

8#号轴

TRIMMER POTENTIOMETER

CA9

CHANGZHOU KENNION ELECTRONICS CO., LTD.

9