

# Rotary Position Sensor

PHS07



## Features:

- Dust-proof construction protects the interior from dust, which maintains stable characteristics
- High accuracy and long life over 1 million cycles
- Stable output characteristics can be secured for external noise and temperature changes

## Electrical Specifications

|                            |                                         |
|----------------------------|-----------------------------------------|
| Total resistance           | 500Ω—1MΩ                                |
| Total resistance tolerance | ±20%                                    |
| Resistance taper           | B taper                                 |
| Rated voltage              | DC 5V, AC 50V                           |
| Rated power                | 0.01W                                   |
| Linearity tolerance        | Less than ±2%                           |
| Insulated resistance       | More than 100MΩ at DC 250V for 1 minute |
| Withstand voltage          | 250V AC for 1 minute                    |

## Mechanical Specifications

|                                   |                      |
|-----------------------------------|----------------------|
| Total rotational angle            | 360° continuous      |
| Rotational torque                 | Less than 50 gf .com |
| Pull strength of rotational shaft | 500gf min            |

## Environmental Specifications

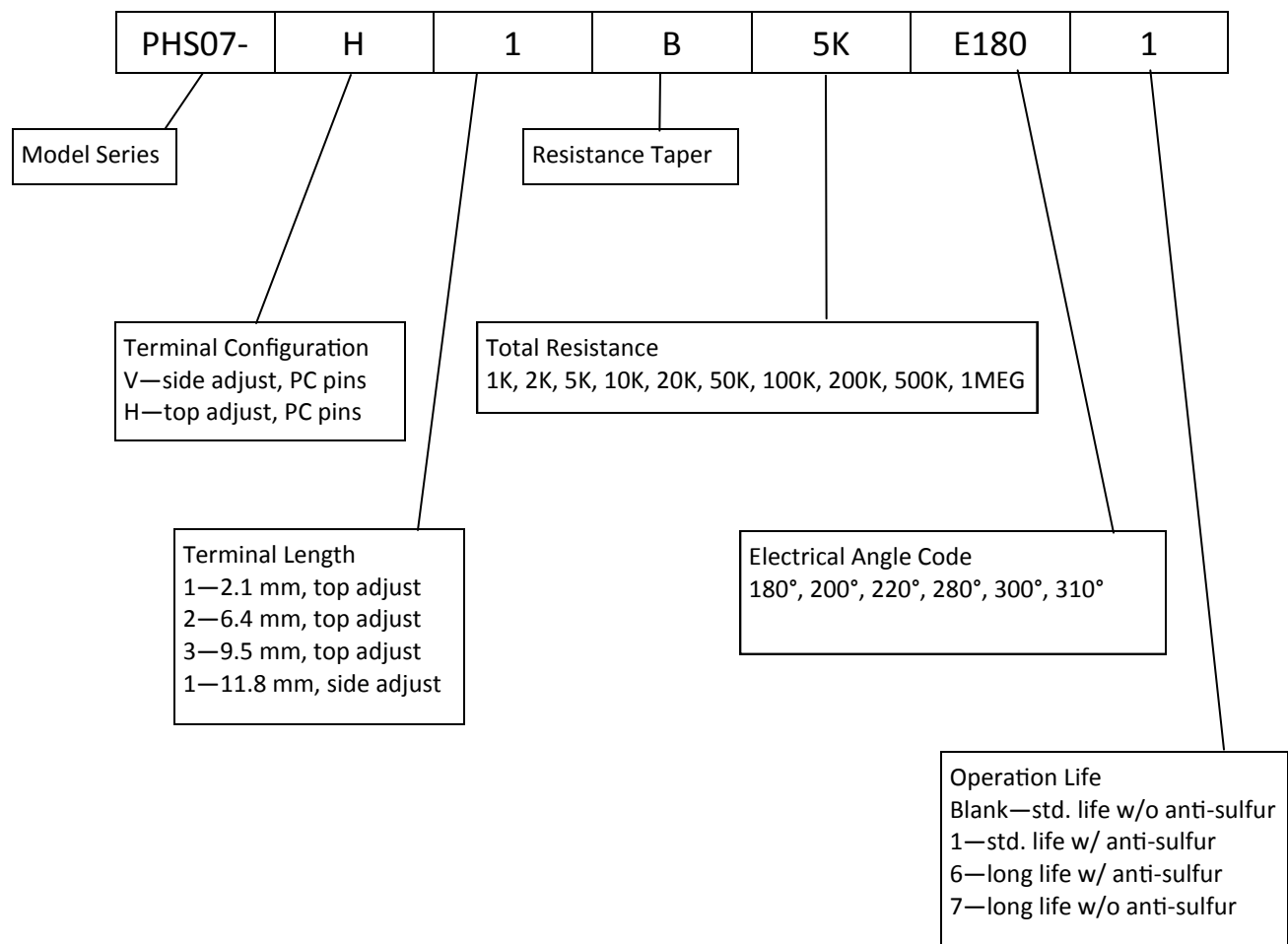
|                             |                                                                           |
|-----------------------------|---------------------------------------------------------------------------|
| Storage temperature         | -40°C to +70°C                                                            |
| Operating temperature       | -10°C to +70°C                                                            |
| Dry heat                    | 70±2°C, 240±2h, ΔTR+5%/-30%                                               |
| Cold                        | -30±2°C, 300±5h, without load, ΔTR±20%                                    |
| Damp heat                   | 70±2°C, 85% RH, 300±5h, ΔTR+35/-5%                                        |
| Temperature cycles          | -10°C—+70°C, 5 cycles, ΔTR ±10%                                           |
| Rotational life             | Standard life: 500,000 cycles min.; Long life: 1,000,000 cycles min.      |
| Temperature characteristic  | 70±3°C, 5H, ΔTR+5%/-20%                                                   |
| Soldering condition         | Wave soldering: 260±5°C sec max.; Manual soldering: 350°C±10°C 3 sec max. |
| Operating temperature range | -10°C—+70°C                                                               |

### General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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### How to Order

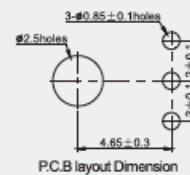
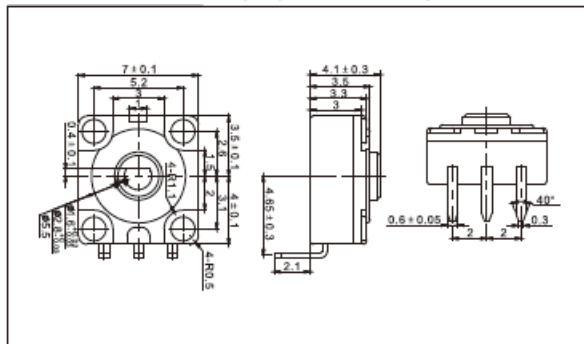


## PHS07

## Drawings

**PHS07-H1**

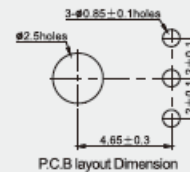
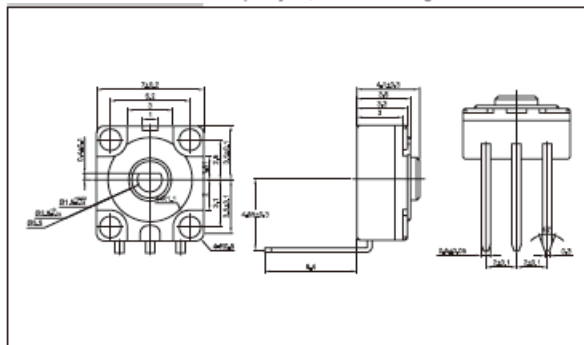
Top Adjust, Terminal Length 2.1mm



Schematic

**PHS07-H2**

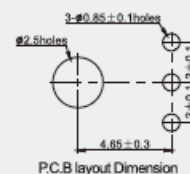
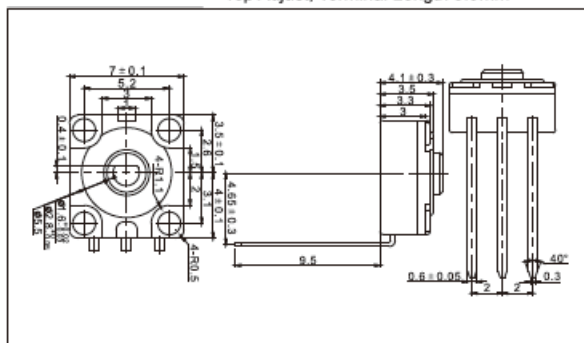
Top Adjust, Terminal Length 6.4mm



Schematic

**PHS07-H3**

Top Adjust, Terminal Length 9.5mm



Schematic

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