## **Rotary Position Sensor**

### **PHS04 Series**



### Features:

- Angle/Position sensor with more than a 300,000 life cycle
- Small footprint size at 4mm width x 5mm length
- Smooth operation



#### **Description:**

The PHS04 series is a rotary position sensor that features a small footprint, smooth operation, and a 300,000 life cycle. Some applications are game controllers and robot joint angle controls.

#### **Applications:**

- Robot joint angle control
- Game controller

Electrical Characteristics (T <sub>A</sub> = 25° C unless otherwise noted)							
SYMBOL	PARAMETER	MIN	ТҮР	МАХ	UNITS	TEST CONDITIONS	
Ω	Total Resistance	1K		100K	Ohms		
V	Rated Voltage	5.0		50	Volts		
W	Rated Power		0.01		Watts		
	Linearity Tolerance			±5%			
	Resistance Tolerance		20%				
	Sliding Noise			300	mV		
	Withstand Voltage		1		Min	At AC 250V	
	Insulated Resistance	100			mΩ	DC250V, 1 minute	

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.

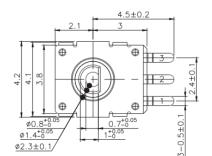
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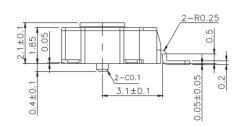
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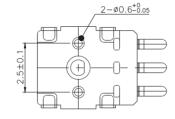
### **PHS04 Series**

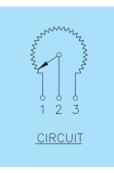


Mechanical Characteristics					
Rotational torque	20mN-m				
Total rotational angle	360°				
Push strength	30 N, 3 sec				
Pull strength	5 N, 3 sec				
Operating temperature	-20°C to 70°C				
Storage temperature	-30°C to 70°C				
Operating life	300,000 (Standard) 500,000 (Long life)				
Dry Heat	70±2°C, 240±2hr, -30%≤ ΔTR≤+5%				
Cold	-30 $\pm$ 2°C, 300 $\pm$ 5hr, without load, $\Delta$ TR $\leq$ $\pm$ 20%				
Damp Heat	70±2°C, 85%RH, 300±5hr, -5%≤ ΔTR≤+35%				
Temperature Cycle	-10~+70°C, 5 cycles , ΔTR≤±10%				
Temperature Characteristics	70±3°Cn 5hr, -20%≤ΔTR≤+5%				
Soldering Conditions	Wave soldering: 255±5°C 3 sec Manual soldering: 3445±5°C 3 sec				









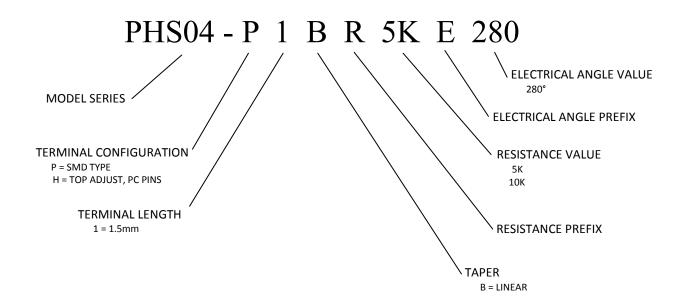
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## **ORDERING INFORMATION**



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Authorized Distributor

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