# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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### **Rotary Position Sensor**

### **PHS11 Series**



### Features:

- Dust proof construction protects the interior from dust, which maintains • stable characteristics
- Excellent resistance materials and high reliability wiper achieves 1,000,000 • cycles
- Ultra-thin size (2.2mm height) •

### **Description:**

The PHS11 series is a rotary position sensor that features dust proof construction, an ultra thin size, and a life cycle of 1 million cycles. Some applications are HVAC sensors and motor drive units.

### **Applications:**

- Rotary angle sensor •
- Electric motor-driven bicycle •
- Motor drive unit
- HAVC sensor •

Electrical Characteristics (T <sub>A</sub> = 25° C unless otherwise noted)								
SYMBOL	PARAMETER	MIN	ТҮР	МАХ	UNITS	TEST CONDITIONS		
Ω	Resistance	1K		100K	Ohms			
	Total resistance tolerance		±20%					
	Power rating			0.1W				
	Linearity (electrical angle < 180°)		±5		%			
	Linearity (180° $\leq$ electrical angle < 300°)		±3		%			
	Linearity (electrical angle $\geq$ 300°)		±2		%			
	Rotational noise			<80	mV			
	Effective Electrical Angle		333	±3	Degrees			
	TCR		±500		ppm/°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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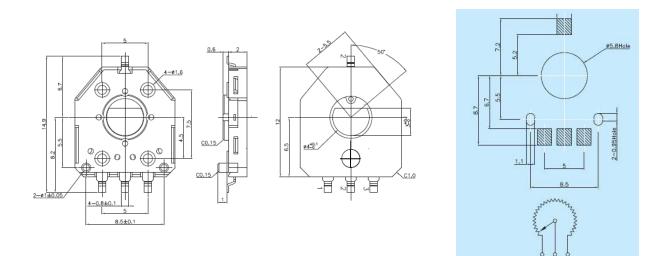
### **Rotary Position Sensor**

### **PHS11 Series**



Mechanical Characteristics					
Rotational Angle	360°				
Rotational torque	0-30gf-cm				
Shaft push/pull strength	> 1.0kgf for 10 sec min				
Storage Temperature	-40°C to +120°C				
Operating Temperature	-40°C to +120°C				
Life Cycles	1,000,000 cycles min				
Dry Heat	120 ± 3°C, 250 ±8H △TR ± 20%, Linearity: ±2%				
Cold	-40 ± 3°C, 168 ±4H △TR ± 20%, Linearity: ±2%				
Humidity	60 ± 2°C, 90 to 95RH, 250 ±8H △TR ± 20%, Linearity: ±2%				
Temperature Cycles	-40°C to +120°C, 5 cycles △TR ± 20%, Linearity: ±2%				

### Packaging



General Note

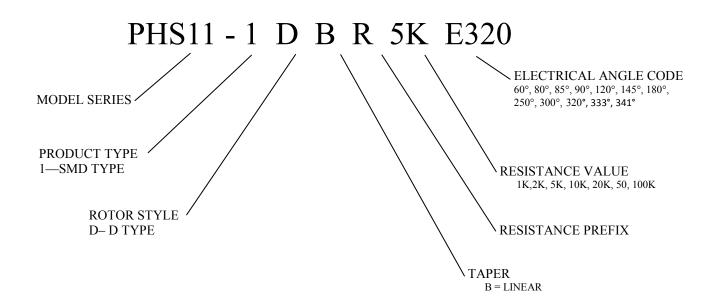
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1 2 3 CIRCUIT



## **ORDERING INFORMATION**



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