Room 1-11K,jindi mingjin ,Yu Heng Road,FuTian District,ShenZhen,PRC
Tel：0755 - 8354 6778 Fax：0755 - 8354 6776
Http://www.xxkq.com

Patented

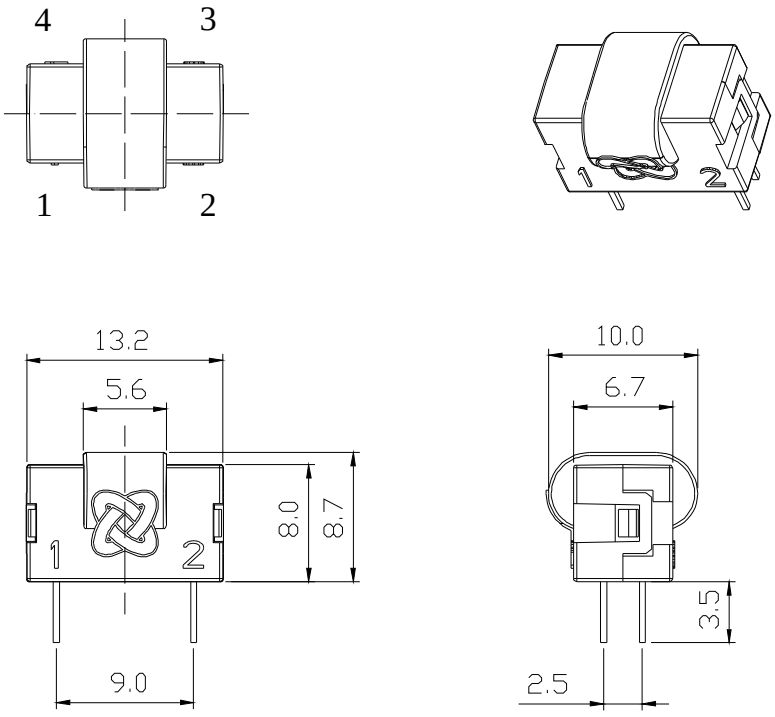
Technical information

Photoelectric motion sensor MS-IR14

Features

- Motion sensor specifically for electric irons
- Small sized, lightweight, easy to install
- High sensitivity and reliability, with a lifespan up to 50,000 hours or more
- Product itself in compliance with safety regulations
- In compliance with Rohs requirements (European standard)

External dimensions



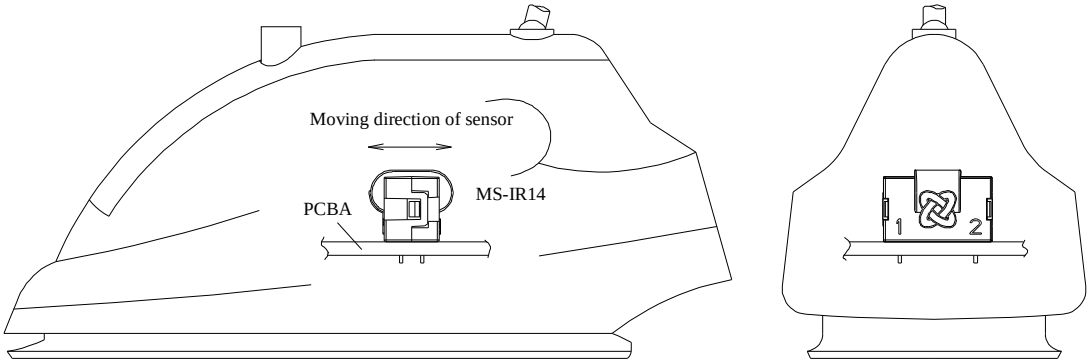
Remarks:

1. Unit of measurement: mm
2. Tolerance of dimensions not shown: ±0.20 mm

Technical information

Photoelectric motion sensor MS-IR14

Way of installation

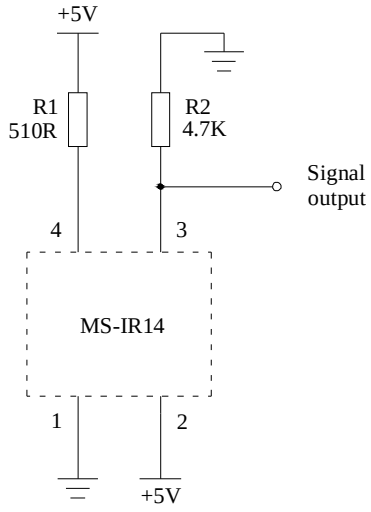


Remarks:

1. This motion sensor is suitable for applications in which the PCBA is placed horizontally.
2. Moving direction of sensor must be in the same direction as the electric iron moves back and forth when used.

Application

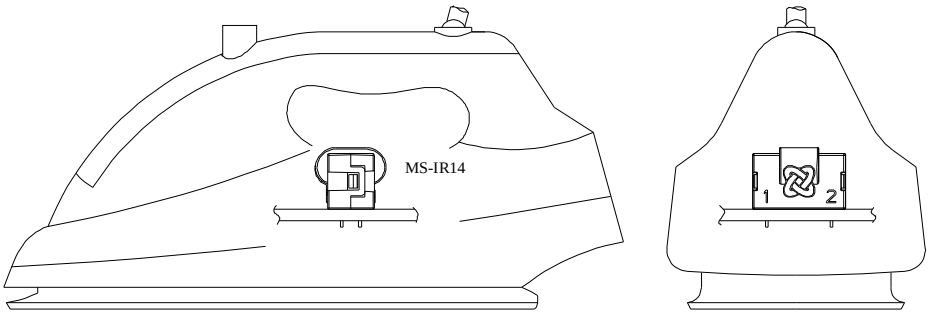
Connect the motion sensor according to the following circuit. The signal output terminal will have a voltage signal output corresponding to the motion condition and attitude of the motion sensor, based on which the MCU or control circuit of the electric iron knows its motion condition and attitude, thus sending commands accordingly to meet functional and safety requirements.



Typical 5VDC circuit application

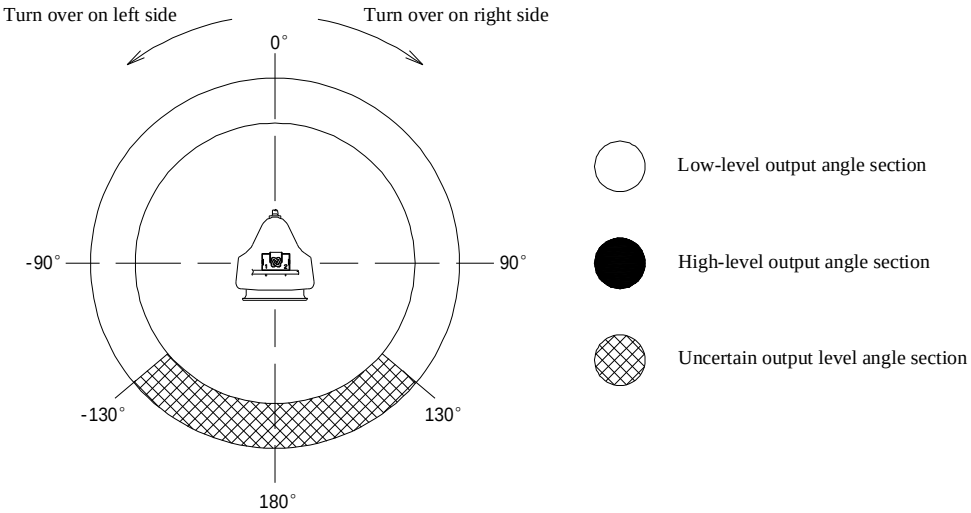
The signal output is detailed as follows:

1. The signal output will be at low level when the electric iron remains motionless horizontally, as shown below.



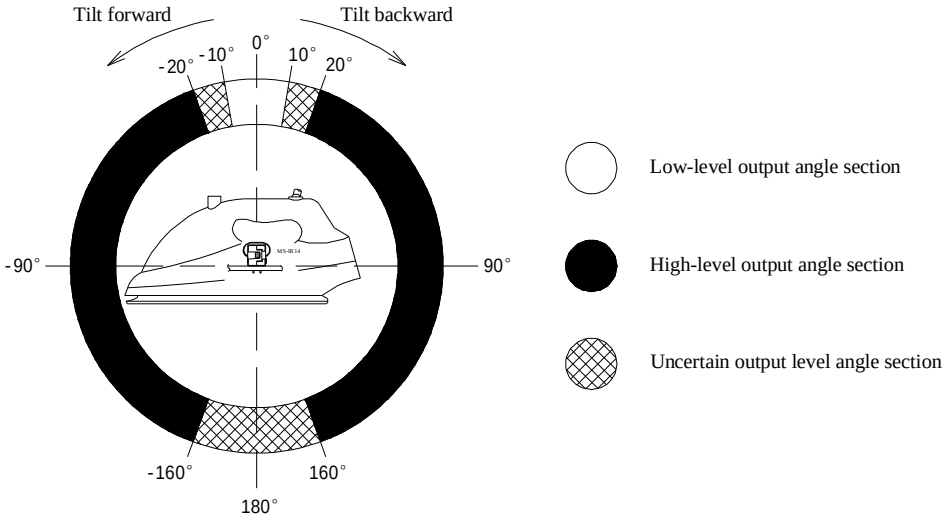
Horizontally motionless electric iron

2. Shown below is the distribution of signal output level angle section when the electric iron turns over to its left or right.



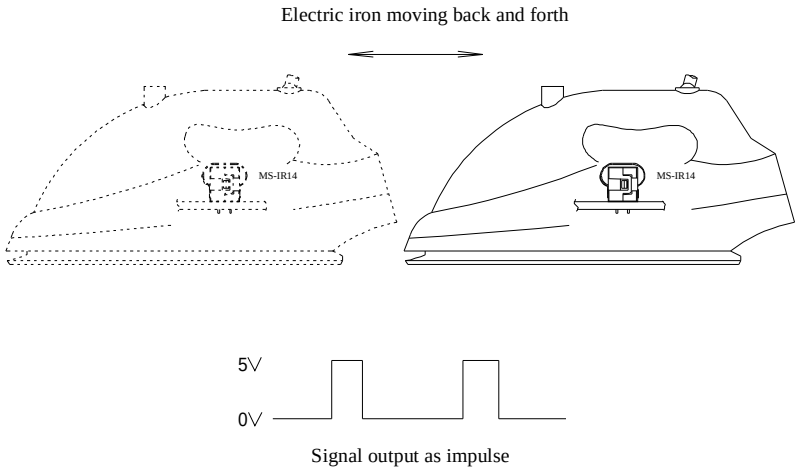
Turn over on left side	0°～-130°	Low-level output
Turn over on right side	0°～ 130°	Low-level output
Turn over on left side	-130°～-180°	Uncertain output level
Turn over on right side	130°～180°	Uncertain output level

3. Shown below is the distribution of signal output level angle section when the electric iron tilts forward or backward.



Tilt forward	0°～-10°	Low-level output
Tilt backward	0°～ 10°	Low-level output
Tilt forward	-20°～-160°	High-level output
Tilt backward	20°～ 160°	High-level output
Tilt forward	-10°～-20°, -160°～-180°	Uncertain output level
Tilt backward	10°～ 20°, 160°～ 180°	Uncertain output level

4. The signal output will be an impulse signal when the electric iron moves back and forth, as shown below.



Signal output as impulse

Operational parameters are shown in the table below (Ta=25℃)

Signal output state	Signal output voltage (V)	True value	Total current (mA)	Power consumption (mW)
Low level	< 0.1	0	<9	<45
High level	> 4.6	1	<9	<45
Impulse	< 0.1 or > 4.6	0/1	<9	<45

Limit parameters (Ta=25℃)

Parameter	Symbol	Specification
Operating temperature	T_{opr}	-25℃ to 85℃
Storage temperature	T_{stg}	-40℃ to 85℃
Soldering temperature	T_{sol}	260±5℃, 5±0.5S
Lifespan	T	50,000 h

Package specification

200 pcs/disc, 10 discs /Carton box
200 pcs/disc, 40 discs/Carton box