

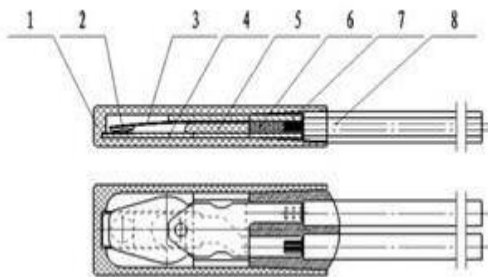
KSD9700

1. Product purpose:

The KSD9700 series thermal protectors feature compact size, insulated housing, high sensitivity, and extended service life. They are widely used for dual protection against overheating and overcurrent in various electrical equipment, including horsepower motors, electric heating appliances, fluorescent lamp ballasts, transformers, automotive motors, integrated circuits, and general electrical devices.

2. Form and Structure:

Enclosure materials: metal, plastic, ceramic. Note: Metal enclosures may carry electric charges and require installation of an insulating outer jacket. Note: Plastic enclosures are rated for temperatures up to 200°C and have a combustion rating of V-0.



number	part name	material	number	part name	material
1	hull	PBT CRN726	5	permanent seat	PBT CRN726
2	movable contact	AgNi/BZn	6	epoxy	1001W
3	bimetal	R26A	7	dynamic contact	BZn
4	contact chip	AgNi10/BZn	8	wire	18-24AWG

3. Precautions:

- When using contact temperature sensing installation, the product must be tightly pressed against the installation surface of the controlled device.
- Do not press or deform the plastic or metal casing during installation to avoid affecting performance.
- Metal encased products with added insulation sleeves must not have the outer insulation sleeves removed, damaged, or crushed during installation to prevent electric leakage and ensure safe operation.
- For circuits with current not exceeding 5A, use copper conductors with a cross-sectional area of 0.4-0.75mm².
- The product shall be stored in a ventilated, clean, dry, and non-corrosive gas-free environment with relative humidity below 90% and ambient temperature below 40°C.

4. Temperature resistance:

- The soldering temperature of the product is within 250 degrees Celsius.
- The soldering pad on the product's back is positioned within 250°C of the heating element..
- The plastic casing exhibits excellent insulation properties and high-temperature resistance (operating temperature range approximately 120-150°C for both short-term and long-term use).

5. Technical parameter :

Technology	Parameter value
contact resistance:	$\leq 50\text{m}\Omega$
insulation resistance:	$\geq 100\text{m}\Omega$
dielectric withstand voltage:	$\geq 500\text{V AC}$
ambient temperature:	$-40^{\circ}\text{C}-150^{\circ}\text{C}$
response speed:	$\leq 1^{\circ}\text{C}/\text{min}$

Voltage current	Working life
DC5V--1A	$\leq 50000\text{s times}$
DC12V--5A	$\leq 20000\text{s times}$
AC115V--5A	$\leq 20000\text{s times}$
AC250V--5A	$\leq 10000\text{s times}$
AC250V--10A	$\leq 10000\text{s times}$

6. Performance: Rated parameters: 250V/5A and 250V/10A.

Rated operating temperature and reset temperature values:

(° C)	operating temperature	reversion temperature	(° C)	operating temperature	reversion temperature
30°C	30±5°C	≥18°C	95°C	95±5°C	70±15°C
35°C	35±5°C	≥25°C	100°C	100±5°C	70±15°C
40°C	40±5°C	≥30°C	105°C	105±5°C	75±15°C
45°C	45±5°C	≥33°C	110°C	110±5°C	75±15°C
50°C	50±5°C	≥35°C	115°C	115±5°C	80±15°C
55°C	55±5°C	42±6°C	120°C	120±5°C	85±15°C
60°C	60±5°C	45±8°C	130°C	130±5°C	95±15°C
65°C	65±5°C	48±10°C	140°C	140±5°C	105±15°C
70°C	70±5°C	50±12°C	150°C	150±5°C	110±15°C
75°C	75±5°C	53±14°C	160°C	120±5°C	120±15°C
80°C	80±5°C	55±15°C	170°C	130±5°C	130±15°C
85°C	85±5°C	60±15°C	180°C	140±5°C	140±15°C
90°C	90±5°C	65±15°C	200°C	160±5°C	160±15°C

Customizable for temperatures below 30° C or above 200° C

7. schematic diagram:

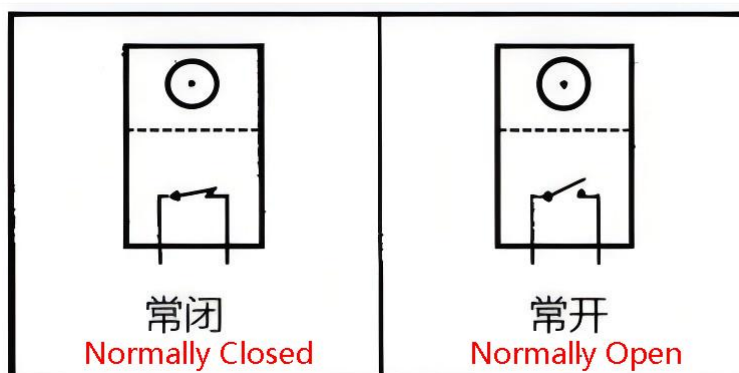
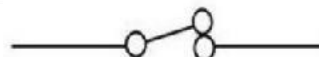
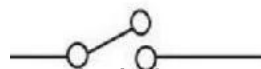


Diagram of closed circuit:



The original state of the temperature switch is closed, and the contact is opened when the temperature exceeds the rated temperature.

Diagram of normally open type:



The original state of the temperature switch is open, and the contact closes when the temperature exceeds the rated temperature.

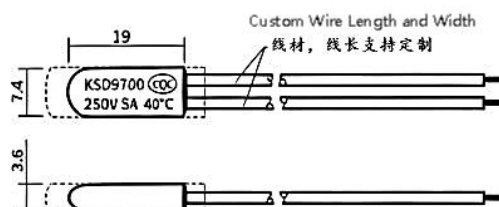
8. Volume packaging:

KSD9700-5A/10A-金属

(Metal head)



weight $\leq 3.5g$



KSD9700-5A/10A 塑壳

(Plastic head)



$\leq 3.3g$



KSD9700-5A/10A-陶瓷

(Ceramic head)



$\leq 3.5g$

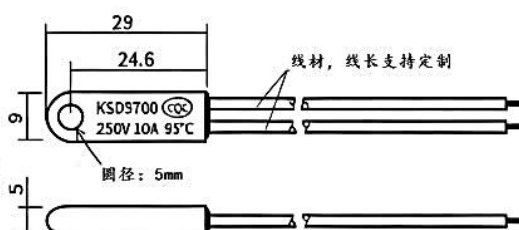


KSD9700-5A/10A-陶瓷带孔

(Ceramic head)



$\leq 4.5g$



KSD9700-Z-5A-中体金属

(Metal head)



≤3g



KSD9700-Z-5A-中体塑壳

(Plastic head)



≤3g

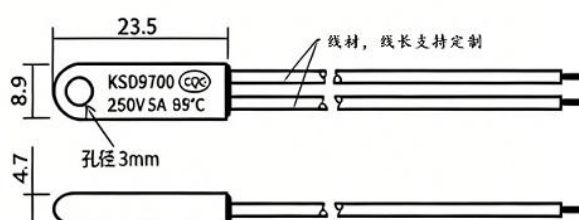


KSD0700-ZKS-5A-中体陶瓷带孔

(Ceramic head)



≤4.5g



KSD9700-M-2A-小体金属

(Metal head)



≤3g

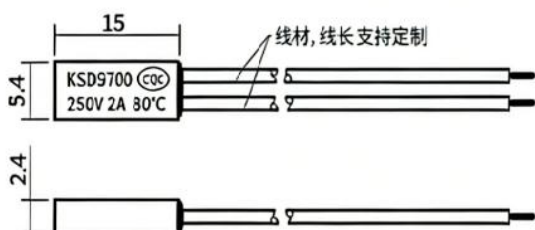


KSD9700-M-2A-小体塑壳

(Plastic head)



≤2.5g



KSD9700-16A-金属

(Metal head)



≤5g

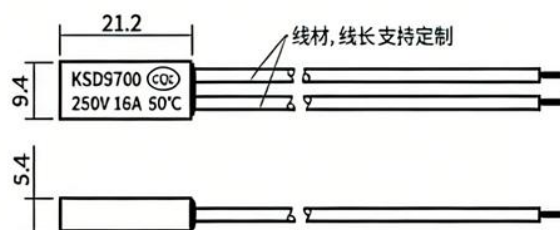


KSD9700-16A-陶瓷

(Ceramic head)



≤5g



9.stationary barrier:



适用塑料大体尺寸: 20*8*4mm



适用塑料中体/TB05尺寸: 15*7*3.5mm



适用塑料小体/TB02尺寸: 15*5.4*2.4mm



适用双压片大体尺寸: 20*8*4mm



适用金属前孔大体尺寸: 20*8*4mm



适用单压片大体尺寸: 20*8*4mm