

Thermal Cutoff ST3814

U L File No. : E100690

ENEC License № : 02921

CCC Self-declaration No.: 2020970205000004(10A), 2020970205000003(15A)

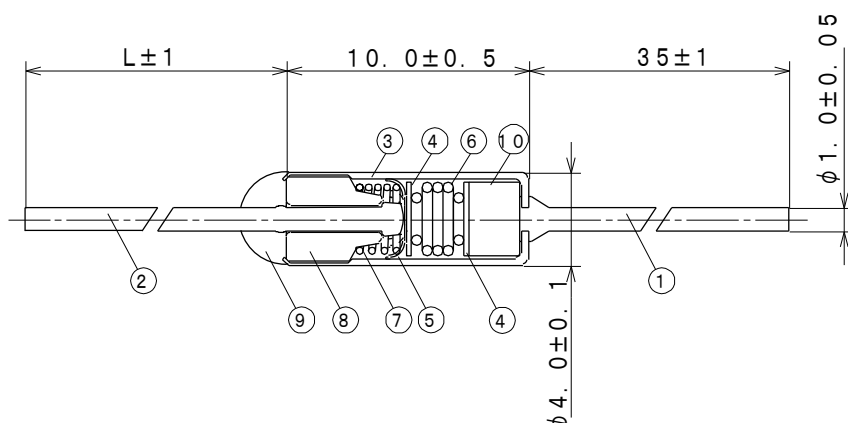
PSE License No.: JET1345-32001-2013

1.Construction and Dimensions

Regarding to "L" Dimension

ST3814 = 19mm (Normal Length)

ST3814-L = 35mm (Long Length)



	Name of parts	Material
1	Lead wire A	Sn-plated Cu wire
2	Lead wire B	Ag-plated Cu wire
3	Case	Ag-plated Cu
4	Ring washer	Cu
5	Moving contact	Ag-alloy
6	Spring A	Stainless-Steel
7	Spring B	Stainless-Steel
8	Bushing	Ceramic
9	Sealant	Epoxy resin
10	Thermal element	Organic compound

2.Temperature and Electrical rating.(Resistive load)

Model No.	Tf (°C)	Th (°C)	Tm (°C)	Function Temperature (°C)	Rated Voltage (V)	Rated Current (A)	Certifications				
							PSE	UL	C-UL	ENEC	CCC
ST 3814	233	188	263	229 ⁺¹ ₋₃	AC250V	10A	✓	✓	✓	✓	✓
						12A	✓	✓	✓	✓	
						13A	✓	✓	✓	✓	
						15A	✓	✓	✓	✓	✓

※ "✓" = Approved

※ Please note that the maximum continuous use temperature is less than 155°C.

Tf:Functioning Temperature

The temperature at which a thermal cutoffs changes its state of conductivity to open circuit with detection current of 10mA or less as the only load.

Th:Holding Temperature

The maximum temperature at which thermal cutoffs can be maintained while conducting rated current for 168 hours state of conductivities to open circuit.

Tm:Maximum temperature

The maximum temperature at which a thermal cutoffs which has changed its state of conductivity can maintained for 10 minutes during which it's mechanical and electrical properties will not be impaired.

3. Test

3-1. Calibration verification test

(1) After the thermal cutoff is tested in accordance with paragraphs 3.1.(2) and 3.1.(3), the observed functioning temperature of each thermal cutoff shall not differ by more than plus 0°C and minus 10°C from the rated functioning temperature.

(2) Equilibrium conditions of oven temperature prior to the start of the test are to be established approximately 10°C below the rated functioning temperature for 2 hours or more. The temperature in the oven is then to be increased at a rate of 0.25-0.50°C per minute until all thermal cutoff open.

(3) Opening of a thermal cutoff is to be determined by a detecting current through the thermal cutoff not more than 0.01 amperes.

3-2. Overload test

(1) After the thermal cutoff is tested in accordance with paragraph 3.2.(2) and 3.2.(3). There shall be no damage to the integral leads of a thermal cutoff. The case of an enclosed element shall remain intact.

(2) The test current is 1.5 times rated current. The test potential is 250V.

(3) Thermal cutoff is to be placed in test oven that has been stabilized at 10°C below the rated functioning temperature and then the temperature of oven is to re stabilize. The thermal cutoff is then to be energized and the oven temperature is to increase at the rate of $2 \pm 1^\circ\text{C}$ per minute and the test is to be continued until the thermal cutoff function.

Humidity, Transient Overload Current Test, Holding temperature Test, Maximum Temperature Limit and Thermal Element Stability Test, etc, is in accordance with UL 1020.