

Current Sensor

Product Series: SCT-CTS

Part number: SCT-CTS/P2, SCT-CTS/P3,
SCT-CTS/P4, SCT-CTS/P5

Version: V1.7



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CONTENT

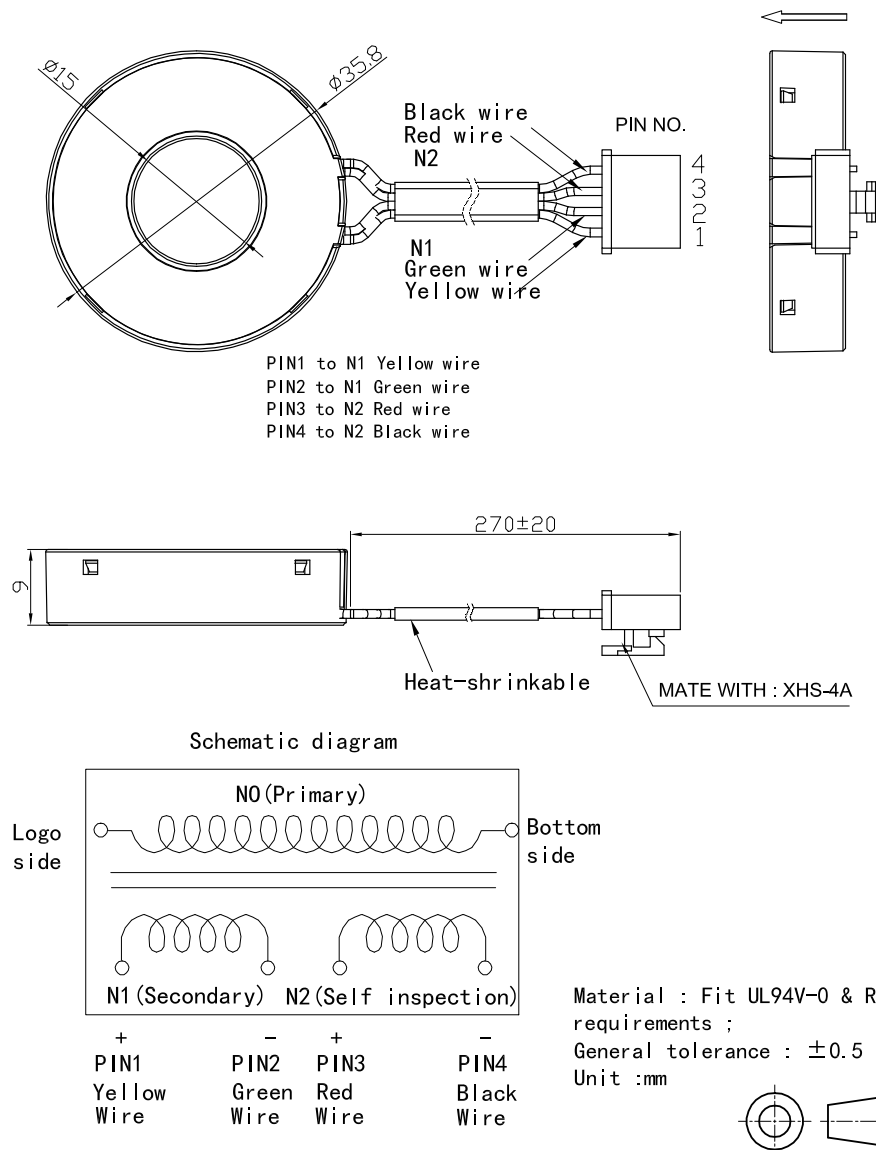
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1. Description

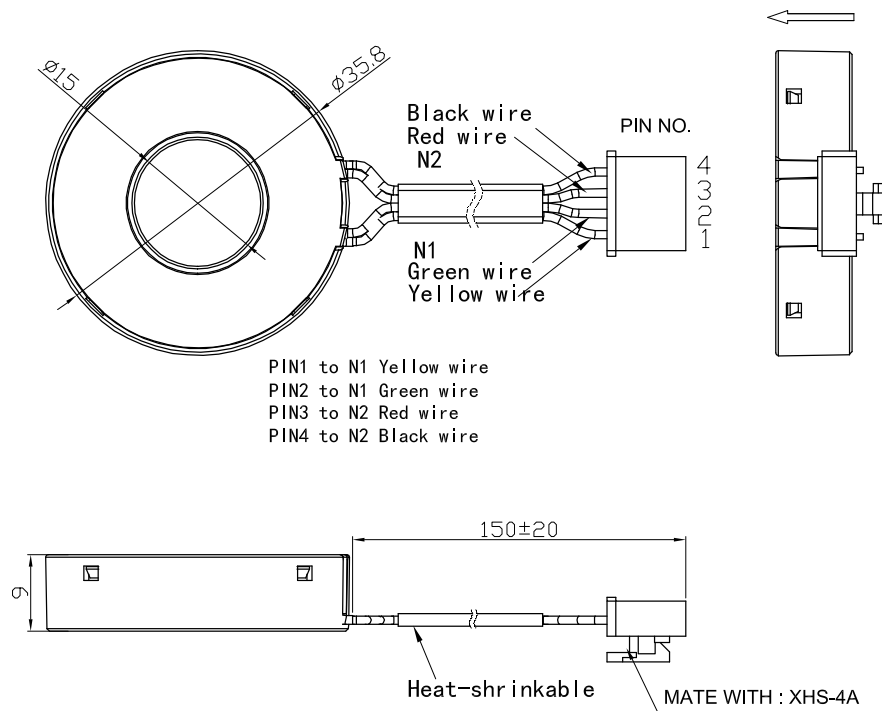
SCT-CTS/P series products built-in arc detection function, can detect the weak high-frequency current signal in the aperture.

2. Dimensions

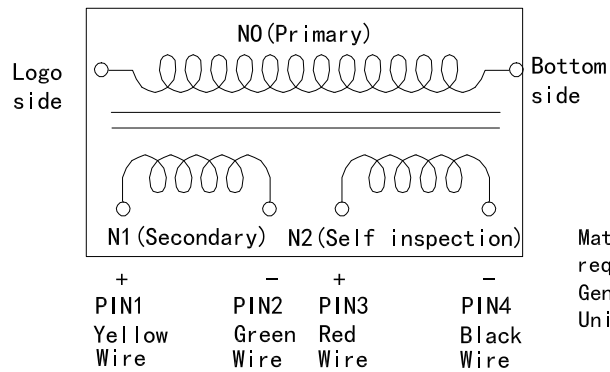
2.1 SCT-CTS/P2



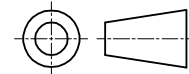
2.2 SCT-CTS/P3



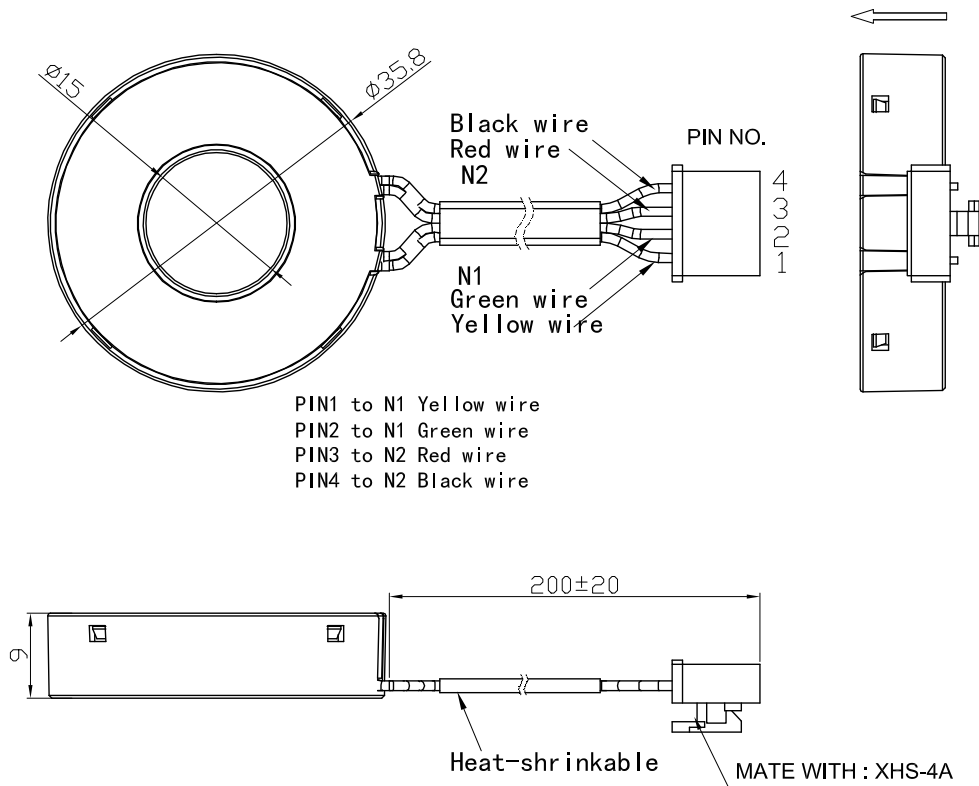
Schematic diagram



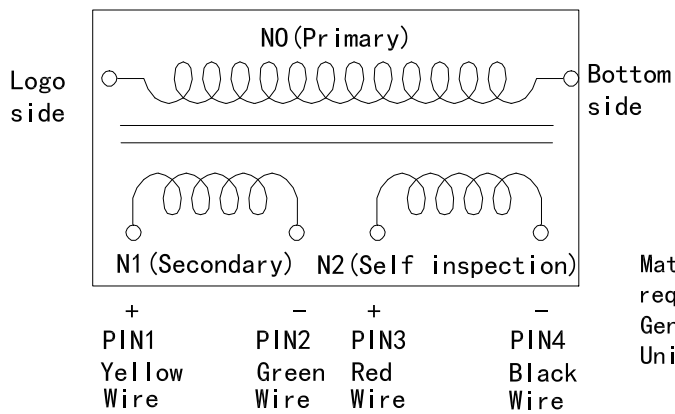
Material : Fit UL94V-0 & RoHS requirements ;
General tolerance : ± 0.5
Unit :mm



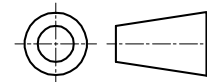
2.3 SCT-CTS/P4



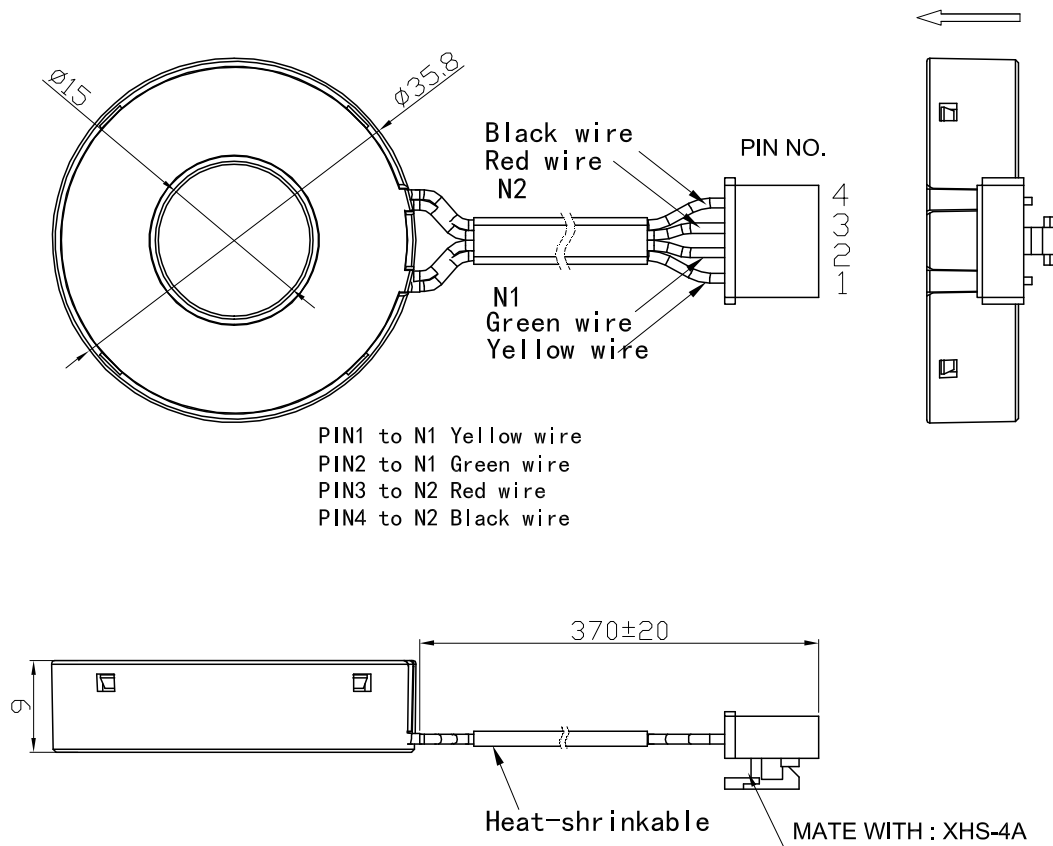
Schematic diagram



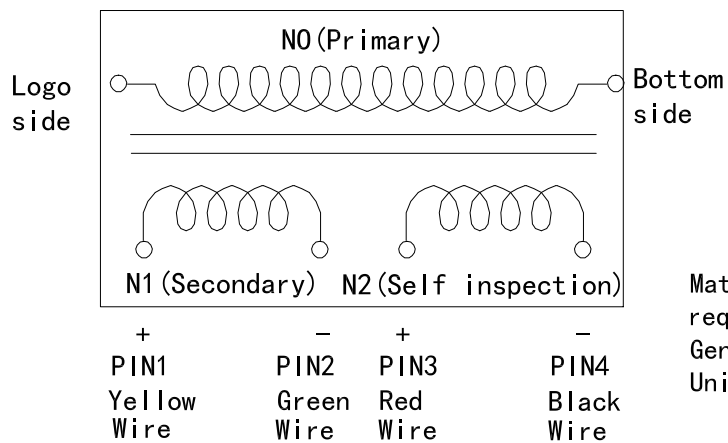
Material : Fit UL94V-0 & RoHS requirements ;
General tolerance : ± 0.5
Unit : mm



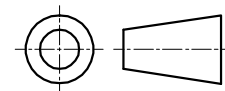
2.4 SCT-CTS/P5



Schematic diagram



Material : Fit UL94V-0 & RoHS requirements ;
 General tolerance : ± 0.5
 Unit : mm



Description of Technical Requirements :

1) The dimensions without tolerance are in accordance with GB/T 1804-M ;

3. Performance parameters

NO.	project	terminal	Measured value	The test conditions	Test equipment
1	Rated inductance (uH)	N1	530~830	frequency 100 HZ, voltage 1 V	Automatic Capacitance Bridge Tester or Cap
		N2	135~205		
2	resistance (Ω)	N1	0.8~2	need to subtract the internal resistance of the multimeter	multimeter
		N2	0.4~1		
3	Maximum DC current (A)		150		30DQ
4	Insulation Voltage (kV)		4		GPT-9804 Withstand voltage tester
5	Electrical resistance (kV)		4		GPT-9804 Withstand voltage tester
6	Electrical spacing (mm)		> 270		caliper
7	Creepage distance (mm)		> 270		caliper
8	noise (dB)		/		DPO2014BTektronix oscilloscope
9	weight (g)	\			
10	Number of turns of self-checking coil	50			
11	Number of turns of induction coil	100			

4. Core characteristics

4.1 Core cutoff frequency

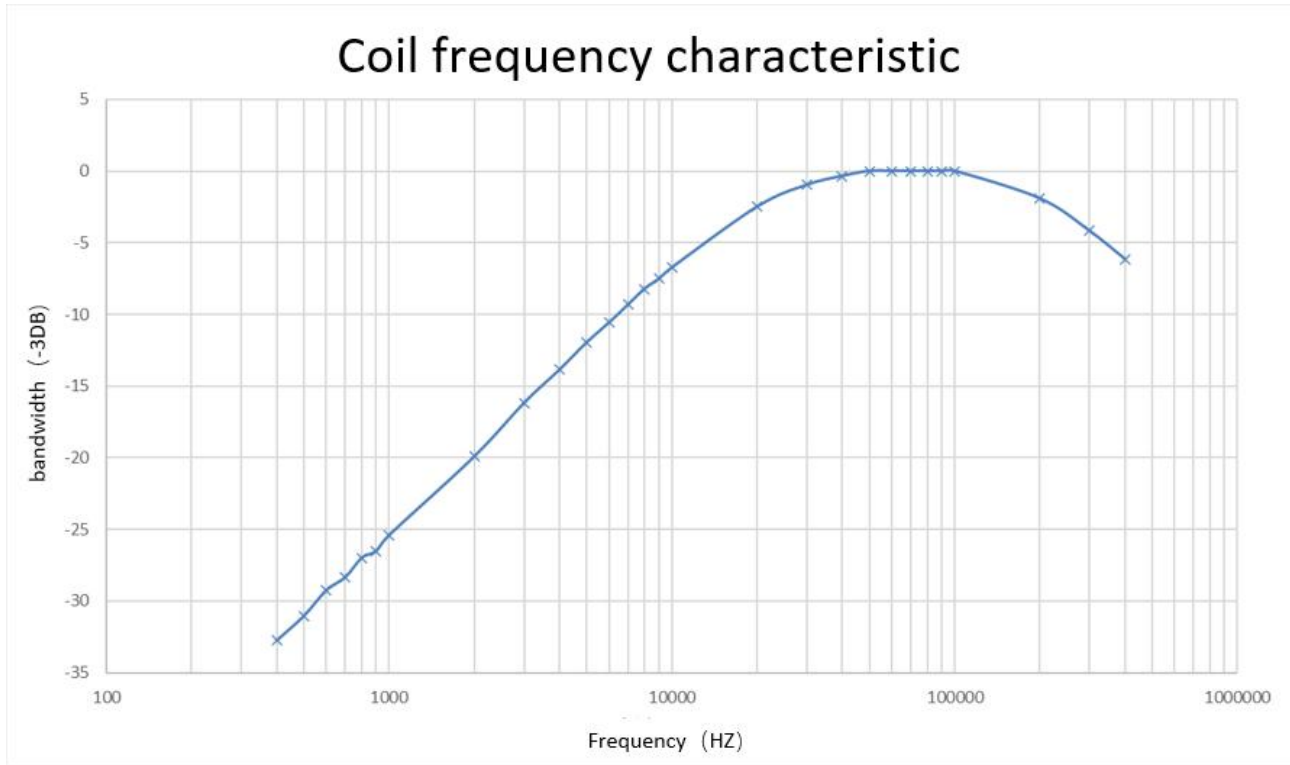


Fig. 1 SCT-CTS/P2 Coil frequency characteristic

Test conditions: the current current of the original side is 10 mA, the sampling resistance is 100 Ohm, and the amplification is 150 times. The output of both ends of the test resistance varies with the current frequency of the original side. The cutoff frequency is calculated according to the volt frequency characteristics.

4.2 Core saturation current

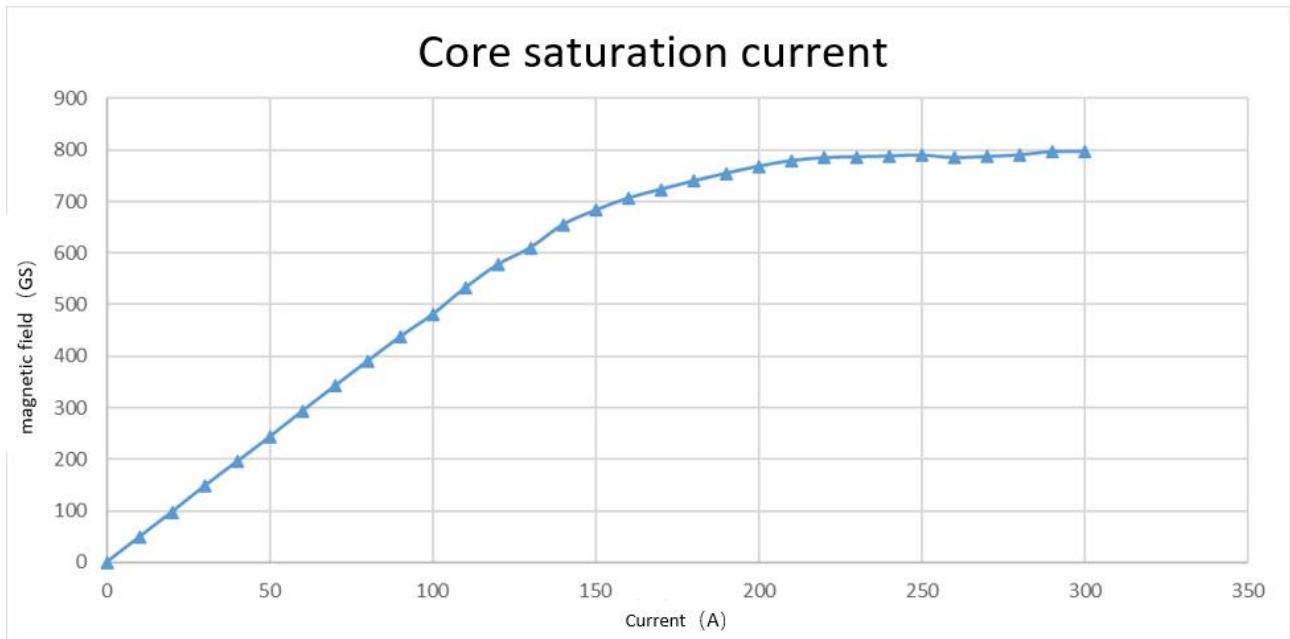


Fig. 2 SCT-CTS/P2 Saturation current curve

Test conditions: The Gauss meter is used to test the slit air gap magnetic field of the magnetic core with the change of current. The saturation magnetic field is 150 A.