

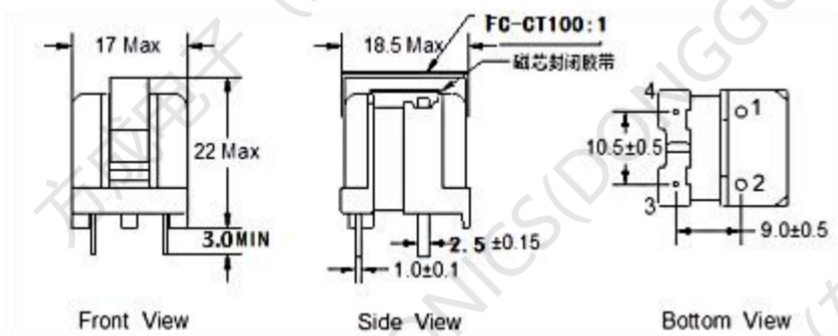
## FC-SCT1090-50A- Series Current Sense Transformers

### Applications

- Sensed current up to 50 A; Designed for frequency range up to 1 MHz and above. Very low primary DC resistance
- 2500 Vrms, one minute isolation (hipot) between windings
- Core material Ferrite
- Operating temperature:  $-40\text{ }^{\circ}\text{C}$  to  $+125\text{ }^{\circ}\text{C}$  /  $+150\text{ }^{\circ}\text{C}$  /  $+155\text{ }^{\circ}\text{C}$
- Recommended solder profile: Reflow

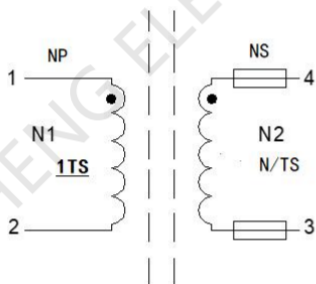


### 1. Dimensions: [mm]

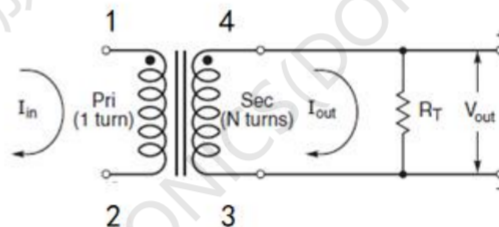


Application in DC circuit current sampling

### 2.Schematic:



### 3. Typical Circuit( DC Current Sense Transformers)



### 4. Recommended Land Pattern: mm



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**5. ELECTRIC CHARACTERICS**

Part Number	Turns Ration	Inductance min.(mH)	NP-NS V(AC)	DCR (MAX)		Sensed DC-Current I (A)
				Primary mΩ	Secondary Ω	
FC-SCT1090-100T-50A	1:100	5.0	2500	0.8	1.5	50
FC-SCT1090-125T-50A	1:125	8.0	2500	0.8	2.0	50
FC-SCT1090-150T-50A	1:150	12.0	2500	0.8	3.0	50
FC-SCT1090-200T-50A	1:200	20.0	2500	0.8	4.5	50
FC-SCT1090-300T-50A	1:300	45.0	2500	0.8	9.5	50
FC-SCT1090-400T-50A	1:400	80.0	2500	0.8	15.0	50
FC-SCT1090-500T-50A	1:500	120.0	2500	0.8	21.0	50

Remark:

<1>Inductance: 1KHz 0.1V Test condition: Ta= 25°C

Application in DC circuit current sampling

**6.Temperature Rise vs Current**

