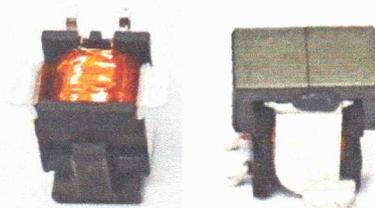
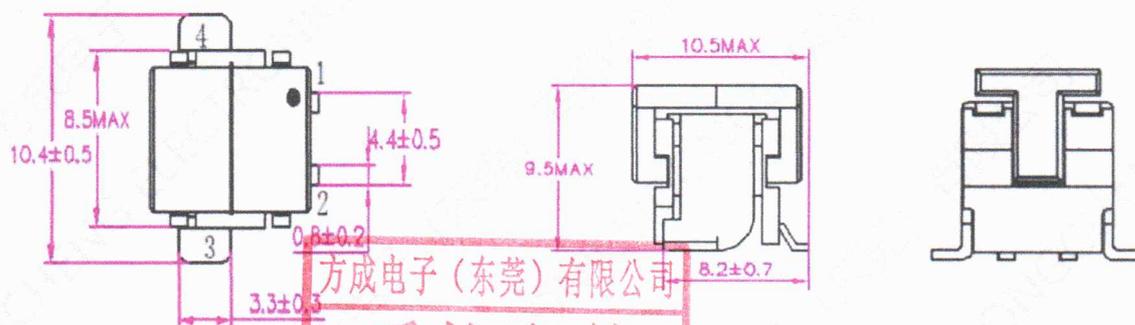


**FC-SCT9060-280T-40A-Series Current Sense Transformers**

Height: 9.5mm Max  
 Current Rating: up to 40A  
 Frequency Range: 100 kHz, 0.1 Vrms  
 Low Primary DCR version  
 Ambient temperature - 40° C to +85° C  
 Storage temperature Component: - 40° C to +125° C  
Applied to high-frequency current transformers

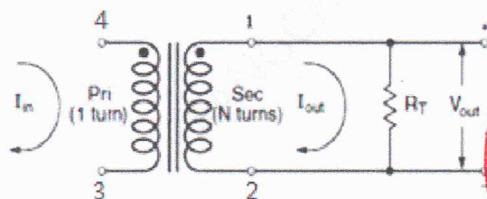


**1. Dimensions:mm**

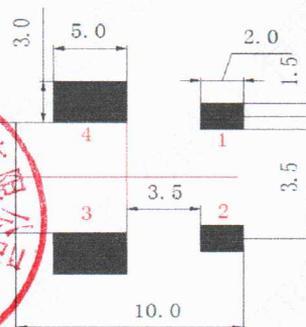


方成电子（东莞）有限公司  
**受控文件**  
 日期: 年 月 日

**2.Schematic:**



**3.LAYOUT RECOMMENDATION**



方成电子（东莞）有限公司  
 技术部

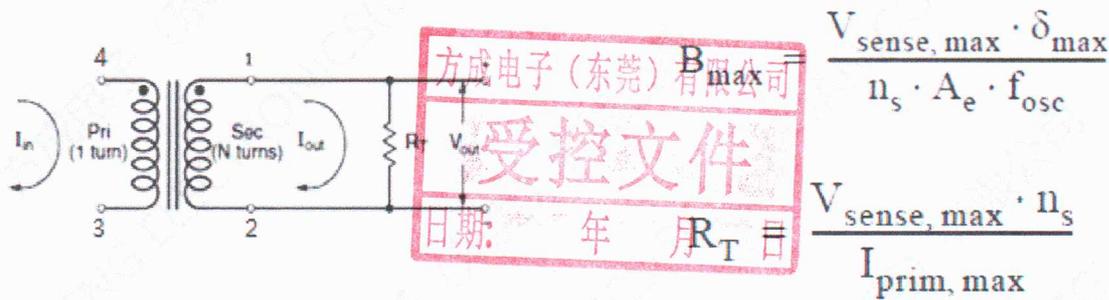
$$B_{max} = \frac{V_{sense,max} \cdot \delta_{max}}{n_s \cdot A_e \cdot f_{osc}}$$

- Core:设计代入: 伏匝比
- 2.3.LengthLe: 17.40mm
- 2.4. Cross Area Ae: 5.25mm<sup>2</sup>
- 2.5 .Volume Ve: 118mm<sup>3</sup>

5. ELECTRIC CHARACTERICS)

Part Number	Turns Ration	Current Rating <sub>2 NP4-3(A)</sub>	Secondary Inductance (PIN1-2-mH min)	DCR (mΩ MAX)		Hipot (DCV <sub>RMS</sub> )
				Primary (7-8)	Secondary (1-3)	Np-Ns
FC-SCT9060-280T-40A	1:280T	40	7.2	0.3	12.0Ω	2250V

6. Application circuit and pinning



With:1

- B<sub>max</sub> Maximum magnetic flux density in the ferrite core of the current sense transformer
- V<sub>sense,max</sub> Maximum output voltage of the measurement signal
- δ<sub>max</sub> Maximum duty cycle
- n<sub>s</sub> Number of turns of the secondary winding of the current sense transformer
- A<sub>e</sub> Effective magnetic area of the ferrite core
- f<sub>osc</sub> Operating frequency of the switching operator IC

Typical value for A<sub>e</sub>: 5.25mm<sup>2</sup>

Typical B<sub>max</sub>: 200 mT

With:2

- R<sub>T</sub> Resistance of burden resistor
- V<sub>sense,max</sub> Maximum output voltage of the measurement signal
- n<sub>s</sub> Number of turns on the secondary side of the CT
- I<sub>prim,max</sub> Maximum primary current (peak current)