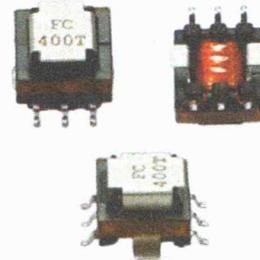
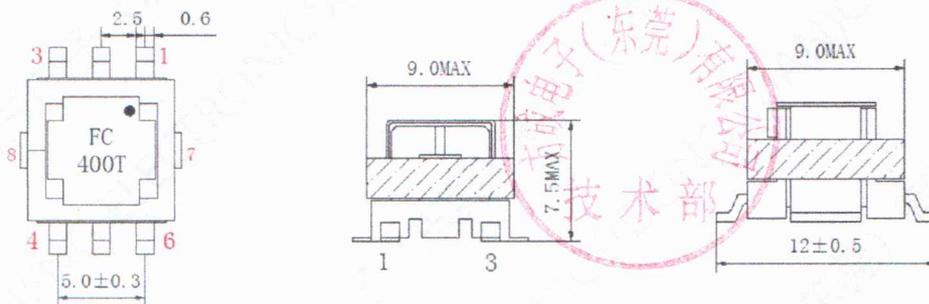


FC-SCT8.5-400T-35A-Series Current Sense Transformers

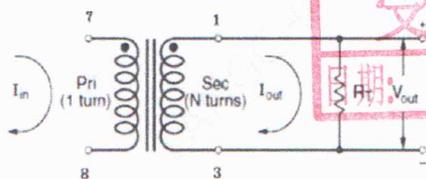
Height: 7.5mm Max
 Current Rating: up to 35A
 Frequency Range: 100 kHz, 0.1 Vrms
 Low Primary DCR version
 Ambient temperature -40° C to +85° C
 Storage temperature Component: -40° C to +125° C
Applied to high-frequency current transformers



1. Dimensions:mm



2.Schematic:

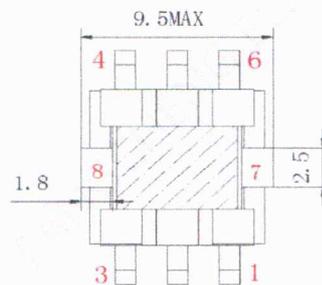
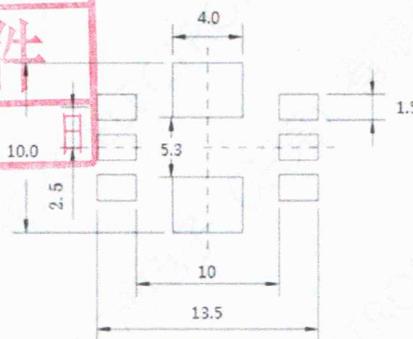


$$B_{max} = \frac{V_{sense, max} \cdot \delta_{max}}{n_s \cdot A_e \cdot f_{osc}}$$

Ac :	3.67 mm ²
Le :	19.95 mm
Ve :	73.22 mm ³

3.LAYOUT RECOMMENDATION

方成电子（东莞）有限公司
 受控文件
 日期： 年 月 日

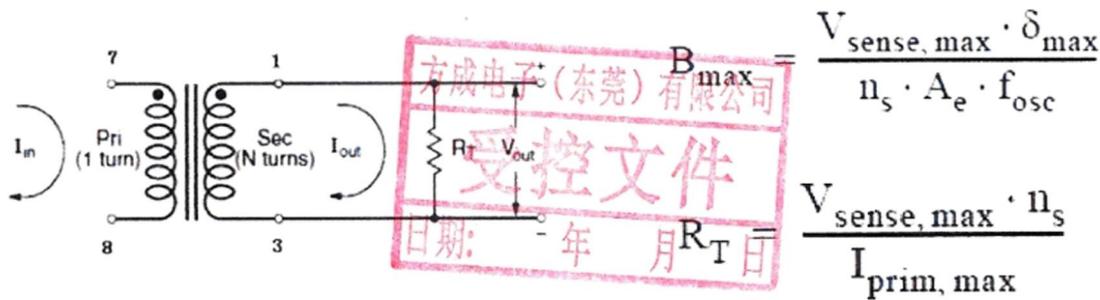


底视图

5. ELECTRIC CHARACTERICS)

Part Number	Turns Ration	Current Rating ₂ NP7-8,(A)	Secondary Inductance (PIN1-3-mH min)	DCR (mΩ MAX)		Hipot (DCV _{RMS})
				Primary (7-8)	Secondary (1-3)	Np-Ns
FC-SCT8.5-400T-35A	1:400T	35	30.0	0.45	17.5Ω	1500V

6. Application circuit and pinning



With:1

- B_{max} Maximum magnetic flux density in the ferrite core of the current sense transformer
- V_{sense,max} Maximum output voltage of the measurement signal
- δ_{max} Maximum duty cycle
- n_s Number of turns of the secondary winding of the current sense transformer
- A_e Effective magnetic area of the ferrite core
- f_{osc} Operating frequency of the switching operator IC
- Typical value for A_e: 3.7 mm²
- Typical B_{max}: 200 mT

With:2

- R_T Resistance of burden resistor
- V_{sense,max} Maximum output voltage of the measurement signal
- n_s Number of turns on the secondary side of the CT
- I_{prim,max} Maximum primary current (peak current)

