

Current Sense Transformer TX-5000 (8.13 x 8.00 x 5.30mm)

Mechanical

Electrical Specification(25°C)

1. Turns Ratio:

Pri : Sec = 1 : 100 ±2%

2. Inductance(Lp)@100KHz,0.1Vrms:

Secondary : 2.0 mH Min

3. DCR@20°C:

Primary : 0.0007Ω Max

Secondary : 5.50Ω Max

4. Sensed current $I_{in(A)}$: 10 A

Primary current of 10 A causes approximately 25°C temperature rise from 25°C ambient.

Higher current causes a greater temperature rise (see temperature rise vs current curve)

5. Terminating resistance R_T : 10 Ω

Terminating resistance(R_T) value is based on 1 Volt output with 10 Amps flowing through the primary. Varying terminating resistance increases or decreases output Voltage/Ampere according to the following equation: $R_T(\text{Ohms})=V_{out} \times N_{sec}/I_{in}$

6. Volt-time product(V-μsec) : 81

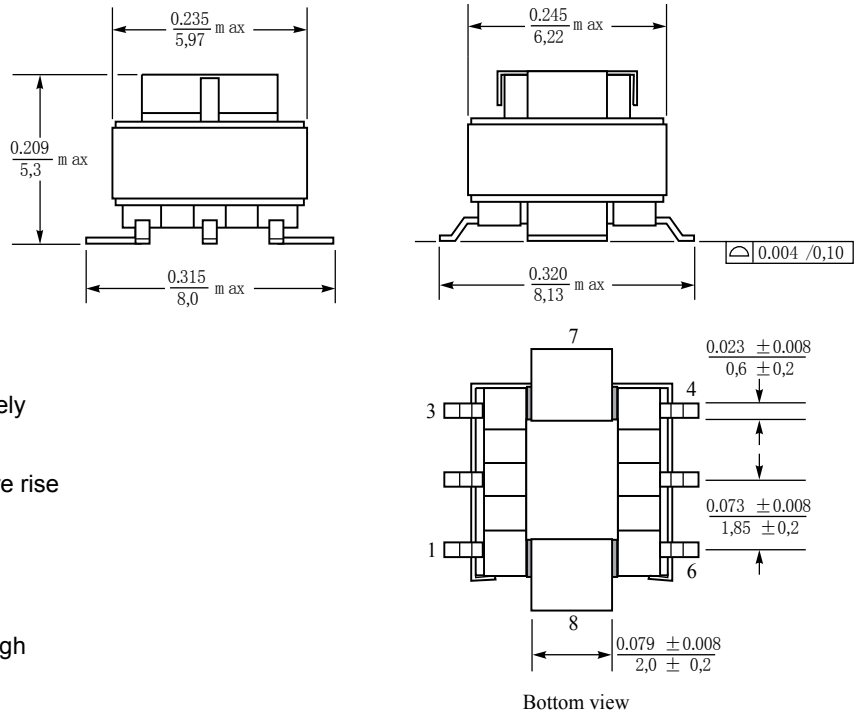
Maximum volt-time product for the secondary

7. Hi-Pot :

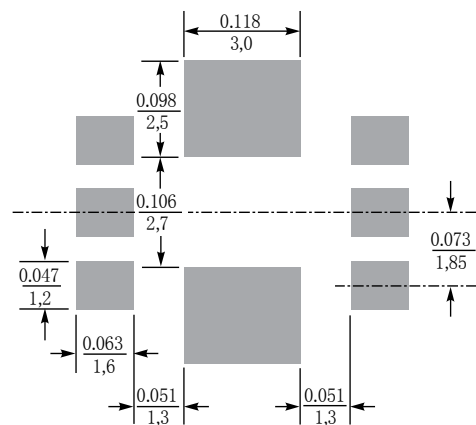
500V AC, 1.0mA, 1Sec : Pri to Sec

8. Operating temperature range : -40°C to +125°C

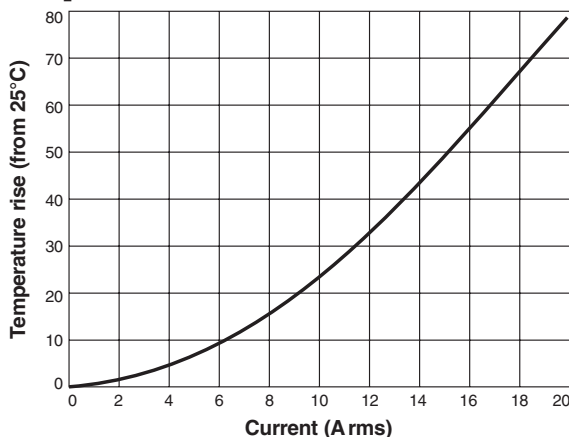
9. Storage temperature range : -40°C to +125°C



Recommended Land Pattern



Temperature Rise vs Current



Schematic

