

SMT CURRENT SENSE TRANSFORMERS



Low profile(Height: 5.3mm Max)

7

Footprint: 8.4mm x 7.2mm Max

7

High turns ratio and low primary DCR

Current rating: up to 10A (I_{in})

2

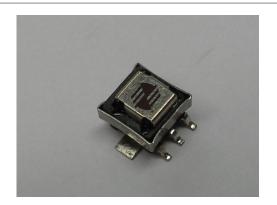
Frequency range: 50kHz to nearly 1MHz

2

Operating temperature -40°C to +125°C



Hipot: 500V isolation between winding



ELECTRICAL SPECIFICATION @ 25°C						
Part Number	Turns Ratio	Secondary Inductance (µH MIN)	Terminating resistance R _T ⁴ (Ohms)	DCR(r Primary (8-7)	mΩ MAX) Secondary (6-4)	Volt-time product ⁵ (V-µsec)
833-00088F	1:20	81	2.0	0.7	400	16
833-00089F	1:30	180	3.0	0.7	870	24
833-00090F	1:40	320	4.0	0.7	1140	32
833-00091F	1:50	500	5.0	0.7	1500	41
833-00092F	1:60	730	6.0	0.7	1980	49
833-00093F	1:70	980	7.0	0.7	4750	57
833-00094F	1:100	2000	10.0	0.7	5500	81
833-00095F	1:125	3000	12.5	0.7	6500	101

Notes:

1. Ordering Information: 833-000xxFc.

833-000xxF = Part nu

= Part number (F: stands for RoHS compliant).

C.

= Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

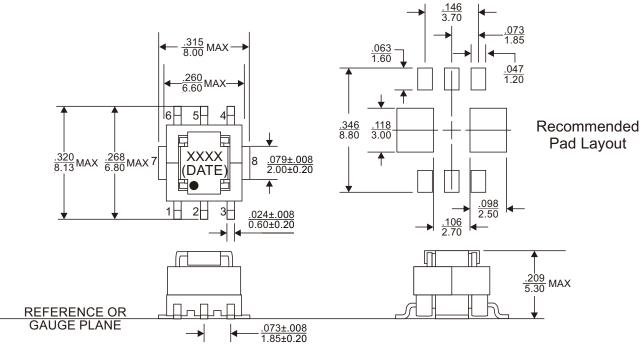
- 2. Inductance is tested at 0.1Vrms, 100kHz.
- 3. The maximum current rating is based upon temperature rise of the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.
- 4. Terminating resistance (R_T) value is based on 1 Volt output with 10 Amps flowing through the primary. Varying terminating resistance increases or decreases output Voltage/Ampere according to the following equation:

$$R_T$$
 (Ohms) = $V_{out} \times N_{sec} / I_{in}$.

- 5. Maximum volt-time product for the secondary.
- 6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

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MECHANICAL DIMENSIONS



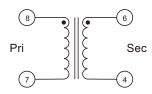
Notes:

- 7. All dimensions are specified in $\frac{\text{inches}}{\text{mm}}$ with higher precedence in mm.
- 8. Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$

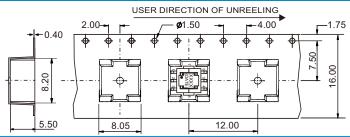
9. Coplanarity: $\frac{.004}{0.10}$ max.

Weight (in gram) : 0.35 typ.
Tape & Reel : 900 / reel

SCHEMATIC



PACKAGING



FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER

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