

# CURRENT SENSE TRANSFORMERS

- Designed for DC/DC Converter applications.
- Primary current rating to 10A .
- Frequency range from 50KHz to 1MHz.
- Primary to secondary isolation 500VDC
- Operating Temperature  $-40^{\circ}\text{C}$  to  $+130^{\circ}\text{C}$

## ELECTRICAL SPECIFICATIONS @25°C

Model Number	Turns Ratio (Pri:Sec.)	Secondary Inductance (mH)+/-50%	Primary DCR (mohms)Max	Secondary DCR (ohms)Max	Primary Peak Sense Current (Amps)
UT33011	1:20	0.047	3	2.5	10
UT33013	1:30	0.106	3	3.8	10
UT33014	1:50	0.3	3	6.5	10
UT33015	1:60	0.42	3	7.8	10
UT33016	1:70	0.58	3	9.5	10
UT33017	1:100	1.18	3	13.5	10
UT33018	1:125	1.84	3	17.0	10
UT33019	1:150	2.6	3	20.5	10

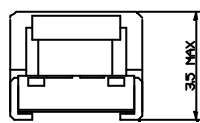
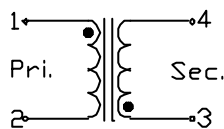
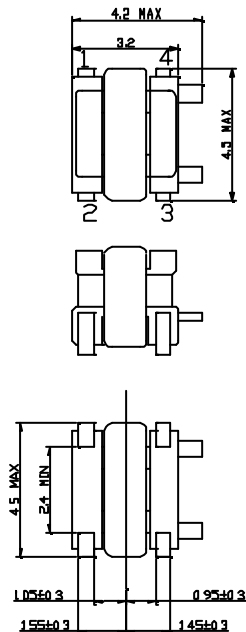
### Notes :

- To calculate the value of the terminating resistor (Rt) use the following formula:  $R_t (O) = V_{ref} * N / (I_{peak\_primary})$
- The peak flux density of the device must remain below 2000 Gauss.  
To calculate the peak flux density for uni-polar current use following formula:  
 $B_{pk} = 61.7 * V_{ref} * (Duty\_Cycle\_Max) * 105 / (N * Freq\_kHz)$

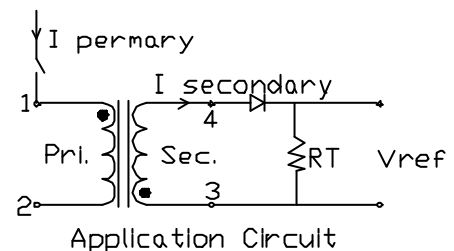
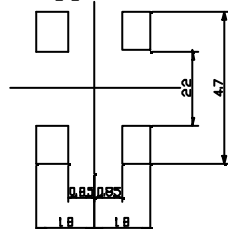
### 3. For RoHS compliant products:

- The UMEC ordering code: **TG-Model Number (Ex. TG-T33011)**
- Terminal Plating : Sn .

### Dimensions(mm)



### Suggested P.C.B. Layout



\*Specifications are subject to change without prior notice

DATA SHEET 03-33 SEP./06  
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