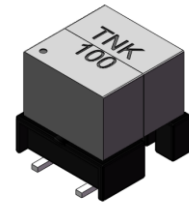
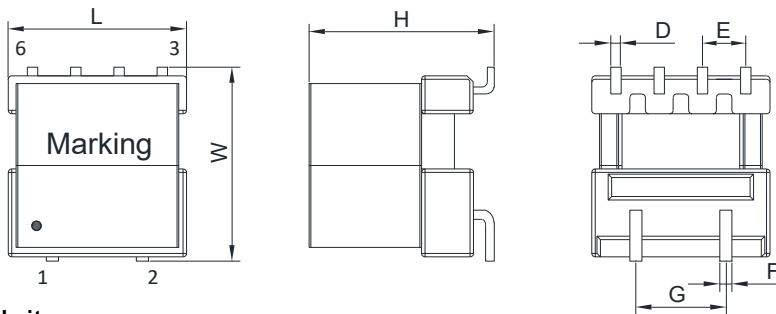


Product Outline

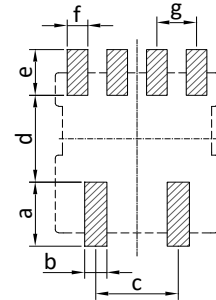
- For use up to 500kHz and sensed currents up to 20A.
- Very low primary DC resistance with frame molded in type.
- Ideally used in On-board Charger(OBC), Mobile device wireless charging and other electronic devices.
- Operating temperature range(Including self temperature rise):-40°C to +125°C.
- Custom design is also available.
- RoHS Compliant.



Dimensions



Recommended Land Patterns

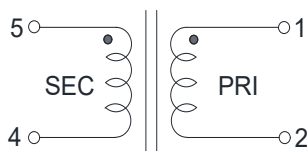


Unit: mm

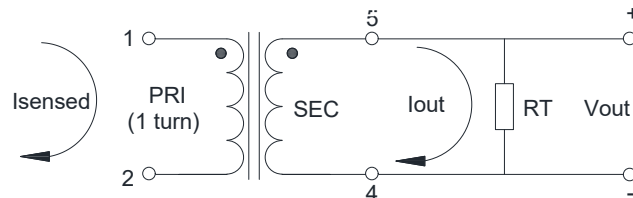
Type	L	W	H	D	E	F	G	a	b	c	d	e	f	g	Packaging (pcs/reel)
CTEP0710	10.6 Max.	11.5 Max.	11.0 Max.	0.6	2.5	0.7	5.2	4.2	1.4	5.2	5.7	3.0	1.3	2.5	300

Dimensions without tolerance are typical.

Schematics



Application Circuit



Electrical Characteristics(at 25°C)

Part Number	Marking	Turns ratio	Inductance ① (mH) Min.	DCR(PRI) (mΩ) Typ.	DCR(SEC) (Ω) Max.	Volt-time ② (μVs)	Isensed ③ (A) Max.	RT ④ (Ω)
CTEP0710-A001	050	1:50	1.70	1.25	1.10	103	20	2.50
CTEP0710-A002	070	1:70	3.00	1.25	2.10	144	20	3.50
CTEP0710-A003	100	1:100	7.00	1.25	4.20	206	20	5.00
CTEP0710-A004	125	1:125	11.0	1.25	5.50	258	20	6.30

Note:

- ① Inductance tested on secondary side at 10kHz, 0.1V using an Agilent/HP 4192A or equivalent.
- ② Maximum volt-time product for the secondary, based on peak flux density 2000Gauss.
To calculate the peak flux density for uni-polar current use following formula:
 $B_{pk}(\text{Gauss}) = 97.09 * V_{REF} * (\text{Max. Duty Cycle}) * 104 / (N * \text{Freq in kHz})$.
- ③ The maximum sensed current (Isensed) is based upon temperature rise of the product and represents the DC current which will cause a typical temperature rise of 40°C from 25°C ambient with no airflow.
- ④ Terminating Resistance (RT) value is based on 1V output with maximum sensed current flowing through the primary.
Varying terminating resistance increases or decreases output voltage/current according to the following formula: $RT(\Omega) = V_{out} * N_{sec} / I_{Sensed}$.

All specifications are subject to change without notice.