

# Current Sense Transformers – T6522-AL



This low cost transformer is designed for up to 300 kHz and above to sense continuous currents up to 3 Amps. The current windings can be connected in series to provide twice the output sensitivity. It offers 500 Vrms interwinding isolation.

The small footprint, low profile, surface mount ceramic case makes it ideal for high-density boards and provides an excellent surface for pick and place operations.

Applications include power supply feedback control, motor protection, overload sensing and detecting load drop or shutdown.

To request free evaluation samples, contact Coilcraft or visit **www.coilcraft.com**.

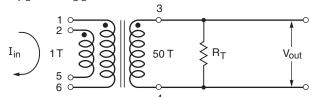
Part number <sup>1</sup>	Turns (N)² pri : sec	Inductance <sup>3</sup> min (mH)	<u>DCR max (Ohms)</u> 1,2 − 5,6 3 − 4	Frequency range <sup>4</sup> (kHz)	Sensed current (A) max I <sub>in</sub>	Volt-time product⁵ (V-µsec)	R <sub>T</sub> (Ohms) for 1 V <sub>out</sub> from 1 A I <sub>in</sub> <sup>6</sup>
T6522-AL_	1:50	3.4	0.006 0.70	50->300	3	30	50

1. When ordering, please specify packaging code:

T6522-ALD

- Packaging: D = 13" machine ready reel. EIA-481 embossed plastic tape (750 per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).
  - B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.
- 2. The two primary windings may be connected in parallel (1:50) to provide up to 3 A ( $I_{in}$ ) sensing capability (3  $V_{out}$ ), or connected in series (2:50) to provide twice the sensitivity (1 A  $I_{in}$  yields 2  $V_{out}$ ).
- 3. Inductance is for the secondary, measured at 100 kHz, 0.1 Vrms.
- 4. For specific questions regarding frequency range, please contact us at cst@coilcraft.com.
- 5. Maximum volt-time product for the secondary.
- 6. Varying terminating resistance increases or decreases output Voltage/ Ampere according to the following equation:  $R_{T} = V_{out} \times N_{sec} / I_{in}.$
- 7. Electrical specifications at 25°C.

### **Typical Application**



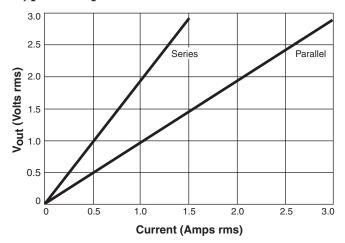


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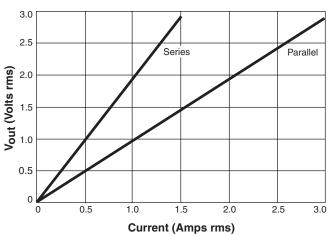
#### **Typical Response** (with $R_T = 50$ Ohm)



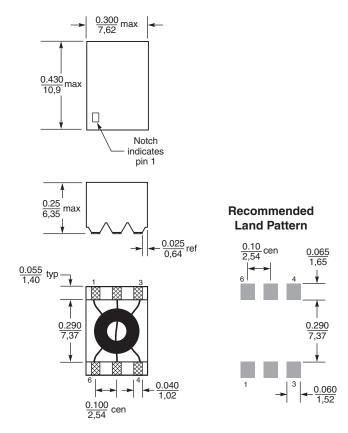


## Current Sense Transformers – T6522-AL

**Typical Response** (with  $R_T = 50$  Ohm)



Dimensions



Weight: 0.9 g

Termination Tin-silver-copper over silver-palladium-platinum Ambient temperature  $-40^\circ$ C to  $+85^\circ$ C

Storage temperature Component: -40°C to +185°C.

Tape and reel packaging: -40°C to +80°C **Packaging** 750/13" reel Plastic tape: 24 mm wide, 0.37 mm thick,

12 mm pocket spacing, 6.5 mm pocket depth.



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