

# SMT Current Sensor – T6522-AL



This low cost transformer is designed for use at 50 kHz to 300 kHz 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.

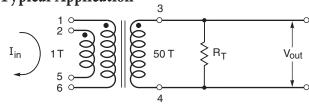
Part number <sup>1</sup>	Turns (N)² pri : sec	Inductance <sup>3</sup> min (mH)	DCR max ( 1,2 – 5,6	·/	Frequency range (kHz)	Sensed current max I <sub>in</sub>	Volt-time product⁴ (V-µsec)	R⊤ for 1 V <sub>out</sub> from 1 A I <sub>in</sub> ₅
T6522-AL_	1:50	3.4	0.006	0.70	50 - 300	3 A	30	50 Ohms

1. When ordering, please specify packaging code:

T6522-ALD

- Packaging: D = 13" machine ready reel. EIA-481 embossed plastic tape (750 per full reel).
  - B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.
- 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 Å I<sub>in</sub> yields 2 V<sub>out)</sub>.
- 3. Inductance is for the secondary, measured at 100 kHz, 0.1 Vrms.
- 4. Maximum volt-time product for the secondary.
- 5. Varying terminating resistance increases or decreases output Voltage/ Ampere according to the following equation:
- $R_T = V_{out} \times N_{sec} / I_{in}$ . 6. Electrical specifications at 25°C

### **Typical Application**





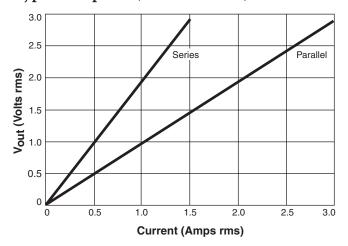
US +1-847-639-6400 sales@coilcraft.com UK +44-1236-730595 sales@coilcraft-europe.com Taiwan +886-2-2264 3646 sales@coilcraft.com.tw China +86-21-6218 8074 sales@coilcraft.com.cn Singapore + 65-6484 8412 sales@coilcraft.com.sg

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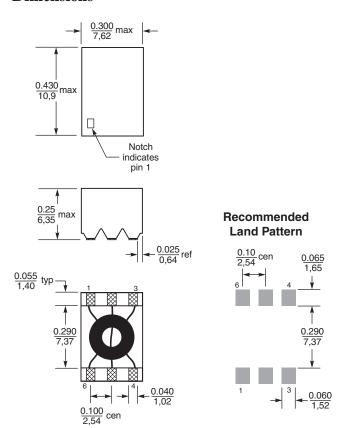
This product may not be used in medical or high risk applications without prior Coilcraft approval Specification subject to change without notice Please check web site for latest information

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





## SMT Current Sensor – T6522-AL Dimensions



Weight: 0.9 g

 Termination
 Tin-silver-copper over silver-palladium-platinum

 Ambient temperature
 -40°C to +85°C

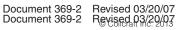
 Storage temperature
 Component: -40°C to +185°C.

 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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