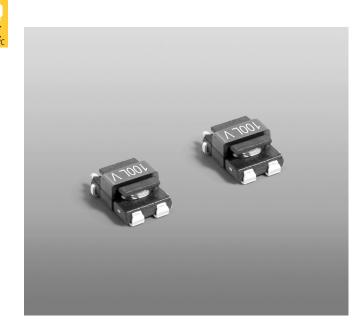


# Current Sense Transformer CU8965-AL



- Developed for Analog Devices ADP1051 Eighth Brick Power Module
- Sensed current up to 20 A; Frequency range designed for up to 1 MHz and above
- Very low primary DC resistance
- 1500 Vdc, one second isolation between windings.

#### Core material Ferrite

Terminations RoHS compliant. 260°C compatible. Tin-silver-copper over tin over nickel over copper

Weight 0.16 g Ambient temperature -40°C to +125°C

Maximum part temperature +165°C (ambient + temp rise) Storage temperature Component: -40°C to +125°C. Tape and reel packaging: -40°C to +80°C Resistance to soldering heat Max three 40 second reflows at

H260°C, parts cooled to room temperature between cycles
 Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)</li>

Packaging 600/7" reel; 2500/13" reel Plastic tape: 16 mm wide, 0.35 mm thick, 8 mm pocket spacing, 3.0 mm pocket depth PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787 PCB Washing.pdf.

	Turns (N)	Inductance <sup>2</sup>	DCR max (Ohms)		Frequency range <sup>3</sup>	Volt-time product <sup>4</sup>	Sensed current I <sub>in</sub> <sup>5</sup>	Terminating resistance $R_T^6$
Part number <sup>1</sup>	pri:sèc´	min (mH)	pri	sec	(kHੱz)	(Vμsec)	max (A)	(Ohms)
CU8965-AL_	1:100	1.33	0.0015	10.68	16 -> 1000	32	20	5.0

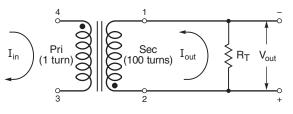
1. When ordering, please specify packaging code:

#### CU8965-ALC

- Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (600 parts 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 C.
  - D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (2500 parts per full reel).
- 2. Inductance measured between secondary pins at 100 kHz, 0.1 Vrms, 0 Adc.
- For specific questions regarding frequency range, please contact us at cst@coilcraft.com.
- 4. Volt-time product is for the secondary, between pin 1 and 2.
- 5. Primary current of 20 A causes less than 25°C temperature rise from 25°C ambient. Higher current causes a greater temperature rise (see Temperature Rise vs Current curve).
- 6. Terminating resistance (R<sub>T</sub>) value is based on 1 Volt output with 20 Amps flowing through the primary. 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.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

### Typical Circuit





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

#### Document 1165-1 Revised 03/31/25

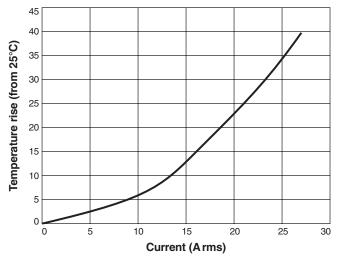
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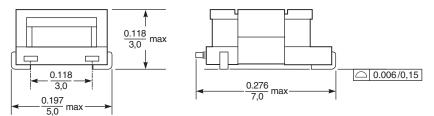
**AEC** 

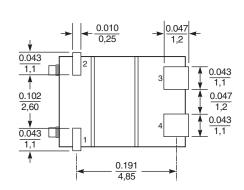
# **CU8965-AL Current Sense Transformer**

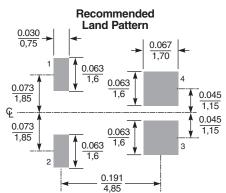
# **Temperature Rise vs Current**



## Dimensions







Dimensions are in  $\frac{\text{inches}}{\text{mm}}$ 



 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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