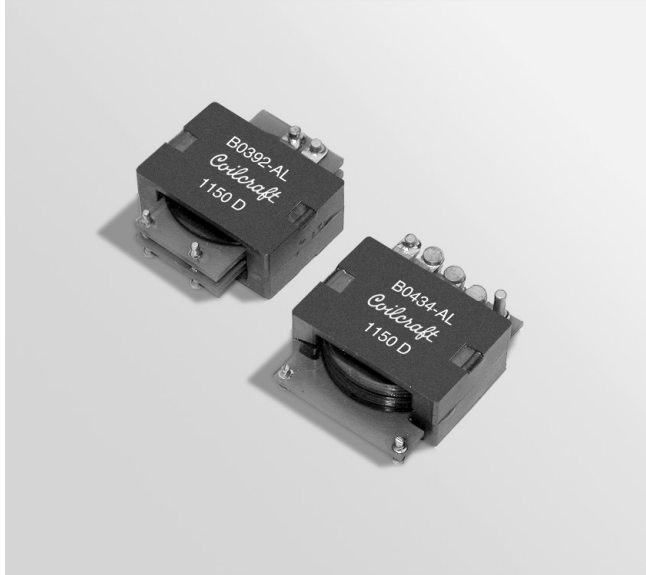




Planar Magnetics

For Texas Instruments
UCC3580



This planar transformer and planar inductor pair is designed specifically for the Texas Instruments UCC3580 family of PWM controllers.

The B0392-AL transformer is engineered for use in single switch, forward topologies operating at 300 kHz. It is ideal for use in high-current telecom power supply applications that require high efficiency in a low-profile package.

The main winding of the B0434-AL inductor serves as an output choke, while the auxiliary winding controls input current to the PWM.

Request free evaluation samples by contacting Coilcraft or visiting www.coilcraft.com.

Transformer

Part number ¹	Output power (W)	Output voltage (V)	Output current (A rms)	Primary inductance ² min (μH)	Leakage inductance ³ max (μH)	DCR max (mOhms)	Pri/sec isolation (Vdc)
B0392-AL_	100	3.3	30.0	65.0	0.22	Primary: 13.5 Secondary: 0.4	1500

1. When ordering, please specify **packaging** code:

B0392-ALD

Packaging: D = 13" machine ready reel. EIA-481 embossed plastic tape (200 parts per full reel).

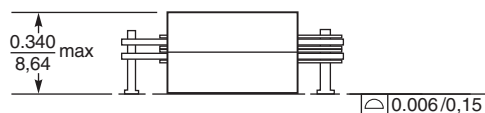
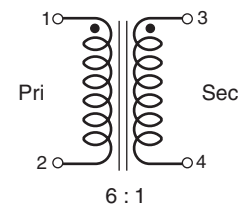
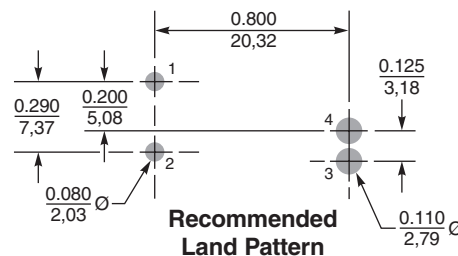
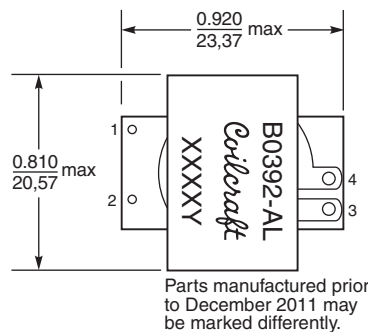
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

2. Inductance measured on an Agilent/HP 4284 between pins 1 and 2 at 250 kHz, 0.1 Vrms, 0 Adc.

3. Leakage inductance measured between pins 1 and 2 at 100 kHz, 0.1 Vrms, 0 Adc with secondary pins shorted.

4. Electrical specifications at 25°C.

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



Dimensions are in inches
mm



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Planar Magnetics for Texas Instruments UCC3580

Output Inductor

Part number ¹	Inductance ² @ 0 Adc (μ H)	I rated Adc	DCR max (mOhms)	Isolation ³ (Vdc)	Isat ⁴ (A)	Irms ⁵ (A)
B0434-AL_	2.0 \pm 10%	30	Main: 1.9 Aux: 1450.0	1100	38	36

1. When ordering, please specify **packaging** code:

B0434-ALD

Packaging: D = 13" machine ready reel. EIA-481 embossed plastic tape (200 parts 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. Inductance measured on an Agilent/HP 4284 between pins 3 and 4 at 10 kHz, 0.1 Vrms.

3. Isolation measured from pin 1 to pin 3.

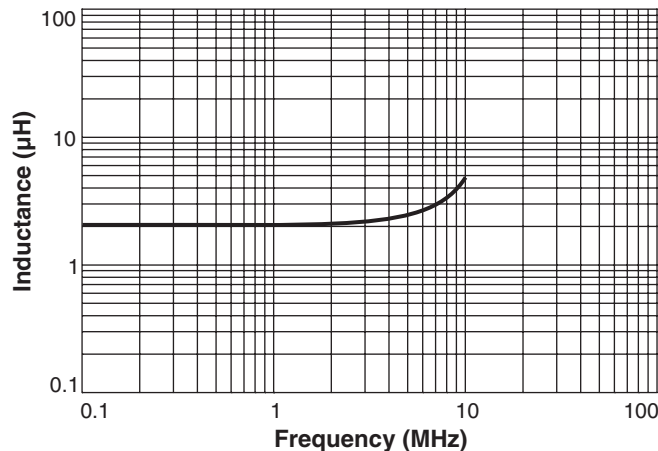
4. DC current at which inductance drops 10% (typ) from its value without current.

5. Current that causes a 40°C rise from 25°C ambient.

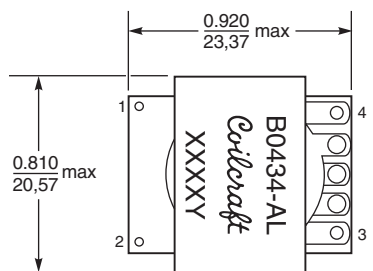
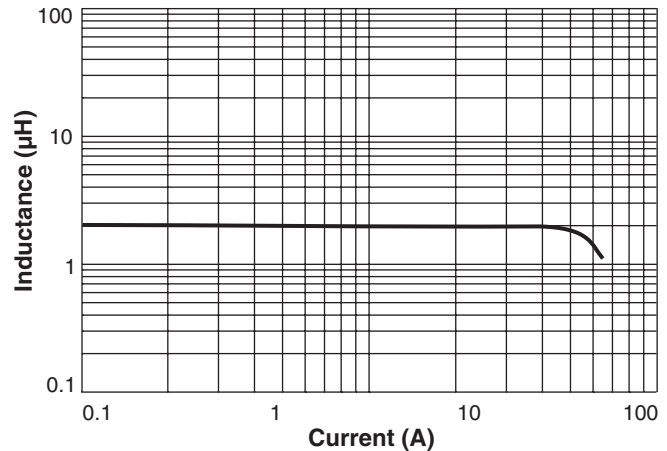
6. Electrical specifications at 25°C.

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

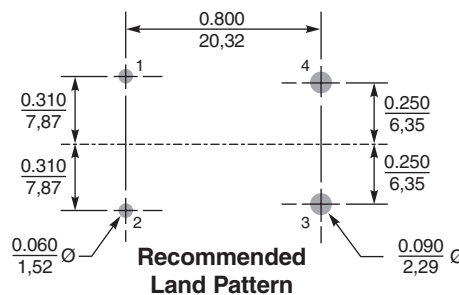
Typical L vs Frequency



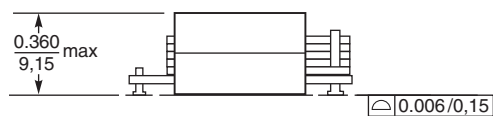
Typical L vs Current



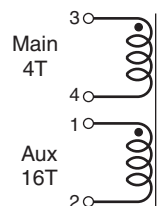
Parts manufactured prior to December 2011 may be marked differently.



Recommended Land Pattern



Dimensions are in inches/mm



Core material Ferrite

Terminations RoHS Matte-tin over nickel over brass

Weight 11.1 – 11.5 g

Ambient temperature -40°C to +85°C

Storage temperature Component: -40°C to +85°C. Tape and reel packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) 38 per billion hours

Mean Time Between Failures (MTBF) 26,315,789 hours, calculated per Telcordia SR-332

Packaging 200 per 13" reel Plastic tape: 44 mm wide, 0.37 mm thick, 32 mm pocket spacing, 9.4 mm pocket depth

PCB washing Only pure water or alcohol recommended



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