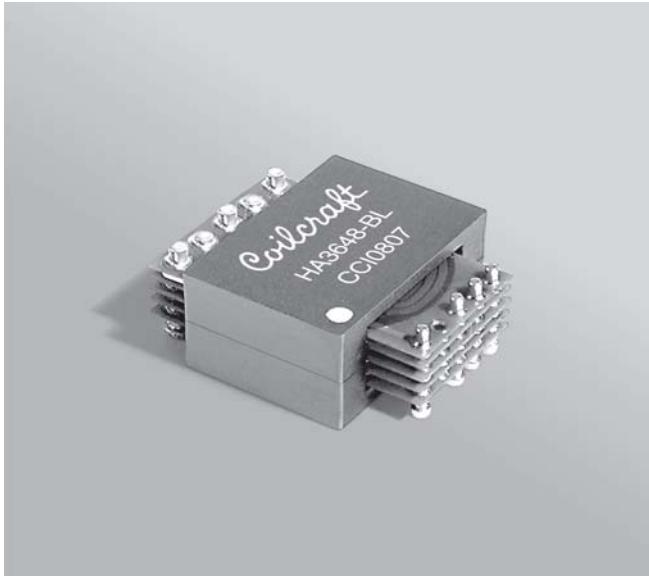




NEW!

# Planar Transformer

For National Semiconductor  
LM5037 PWM Controller



- Developed for NSC LM5037 Dual-Mode PWM Controller
- Designed as half bridge in forward topology
- Auxiliary winding provides 10 V to the chipset
- Input voltage range: 36 – 78 V

**Core material** Ferrite

**Terminations** RoHS matte tin over nickel over brass. Other terminations available at additional cost.

**Weight** 11.8 g

**Ambient temperature**  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

**Storage temperature** Component:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .

Packaging:  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$

**Resistance to soldering heat** Max three 40 second reflows at  $+260^{\circ}\text{C}$ , parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at  $<30^{\circ}\text{C}$  / 85% relative humidity)

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**

38 per billion hours / 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, 9.35 mm pocket depth

**PCB washing** Only pure water or alcohol recommended

Part number <sup>1</sup>	Output power (W)	Output voltage nom (V)	Output current (Adc)	Primary inductance <sup>2</sup> min ( $\mu\text{H}$ )	Leakage inductance <sup>3</sup> max ( $\mu\text{H}$ )	DCR max <sup>4</sup> (mOhms)	Turns ratio pri : sec1 : sec2 : aux	Pri/sec Isolation (Vdc)
HA3648-BL	50	5	10	30.0	0.040	pri: 6.0 sec: 3.2 aux: 160	2:1:1:2	1500

1. When ordering, please specify a packaging code:

HA3648-BL D

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

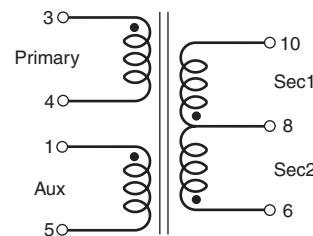
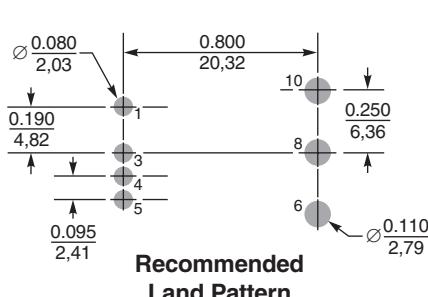
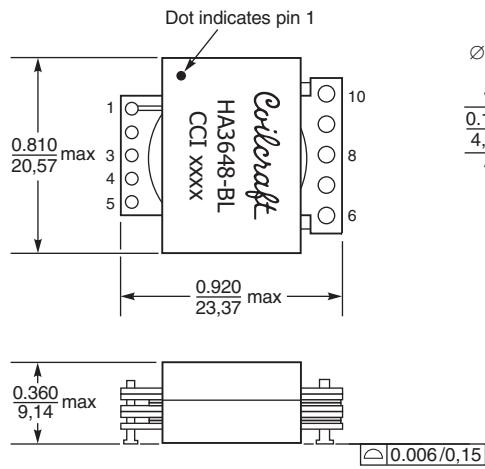
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

2. Inductance measured on an Agilent/HP 4284 between pins 3 and 4 at 250 kHz, 0.1 Vrms, 0 Adc.

3. Leakage inductance measured between pins 3 and 4 at 250 kHz, 0.1 Vrms, 0 Adc with pins 6, 8 and 10 shorted.

4. DCR for the secondary is from pin 6 to pin 10.

5. Electrical specifications at  $25^{\circ}\text{C}$ .



Coilcraft®

Specifications subject to change without notice.  
Please check our website for latest information.

Document 710 Revised 10/31/08

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469  
E-mail info@coilcraft.com Web http://www.coilcraft.com