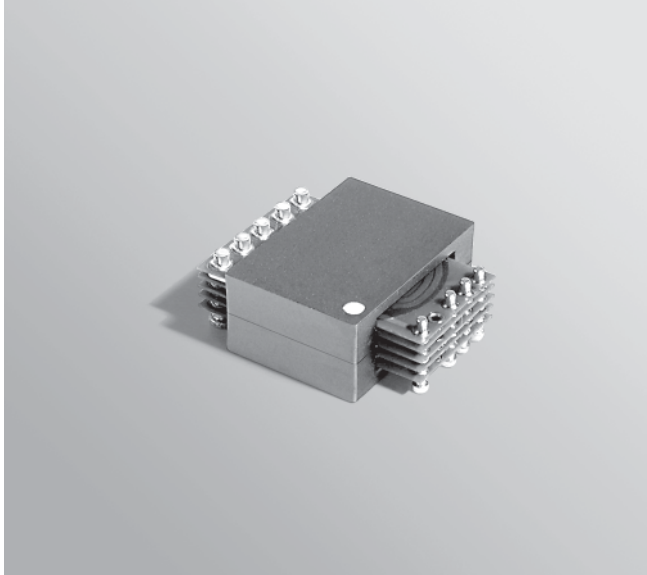




# Planar Transformer

For NSC LM5033 PWM Controller  
for IBC Applications



The B0853-A was designed specifically for the National Semiconductor LM5033 high voltage PWM controller. This planar transformer can be used in push-pull, half-bridge and full-bridge topologies.

It is ideal for use in high-current power supply applications such as open loop intermediate bus converters (IBC) and closed loop voltage mode converters. It offers high efficiency in a low-profile package and features a split secondary, a separate auxiliary winding and 1500 Vdc primary to secondary isolation.

Coilcraft's **Planar Prototyping Kit C356** was used to design this transformer. No tooling or additional parts were required. To order the kit, contact Coilcraft or purchase on-line at <http://order.coilcraft.com>.

Free evaluation samples of B0853-A are available by contacting Coilcraft or by visiting [www.coilcraft.com](http://www.coilcraft.com).

Part number <sup>1</sup>	Output power (W)	Input voltage range (V)	Output voltage nom (V)	Output current (A peak)	Primary inductance <sup>2</sup> min (μH)	Leakage inductance <sup>3</sup> max (μH)	DCR max (mOhms)	Turns ratio <sup>4</sup> pri : sec : aux
B0853-AL_	200	40 – 60	10	20	46.8	0.10	Pri: 10.4 Sec: 4.0 Aux: 160.0	5 : 4 : 4

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

**B0853-AL D**

**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.

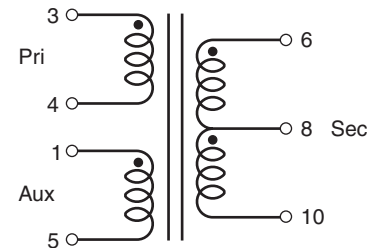
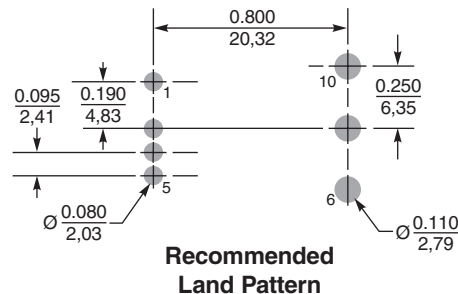
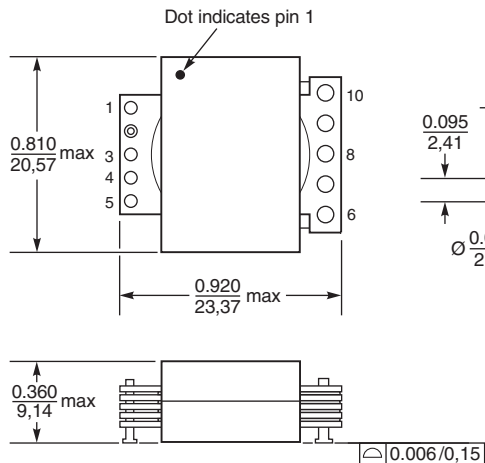
2. Inductance measured on an Agilent/HP 4284 between pins 3 and 4 at 250 kHz, 0.1 Vrms, 0 Adc.

3. Leakage inductance measured between pins 3 and 4 at 100 kHz, 0.1 Vrms, 0 Adc with pins 6 and 10 shorted.

4. Turns ratio is with the secondary windings connected in series.

5. Storage and ambient operating temperature range: -40°C to +85°C.

6. Electrical specifications at 25°C.



**Weight:** 11.6 g  
**Terminations:** Matte tin over nickel over brass  
**Tape and reel:** 200/13" reel 44 mm tape width

**Coilcraft**<sup>®</sup>

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

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