

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-AL are available by contacting Coilcraft or by visiting **www.coilcraft.com**.

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

1. When ordering, please specify packaging code:

B0853-ALD

- Packaging: D = 13'' machine ready reel. EIA-481 embossed plastic tape (200 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 D.

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.







0.360 9,14 1



 Weight:
 11.6 g

 Terminations:
 Matte tin over nckel over brass

 Tape and reel:
 200/13" reel
 44 mm tape width

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Document 403 Revised 05/10/07

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