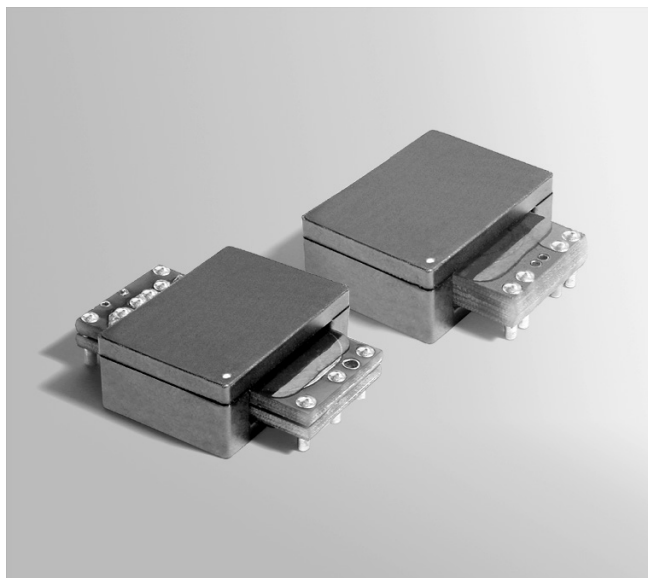




Planar Magnetics

For National Semiconductor
LM5041 IC



This planar transformer and inductor pair were designed specifically for National Semiconductor's LM5041 IC.

The A9786-A transformer is engineered for use in high-current telecom power supply applications that require high efficiency in a low-profile package. The auxiliary winding can be used to control input current to PWMs. It offers very high current handling capability and extremely low DC resistance in a low profile package.

Coilcraft's A9787-A inductor is designed as the output choke for the LM5041.

Planar magnetics offer high power densities along with great reliability and repeatability. Windings are etched into a printed circuit board, ensuring high efficiency and consistency.

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

Transformer

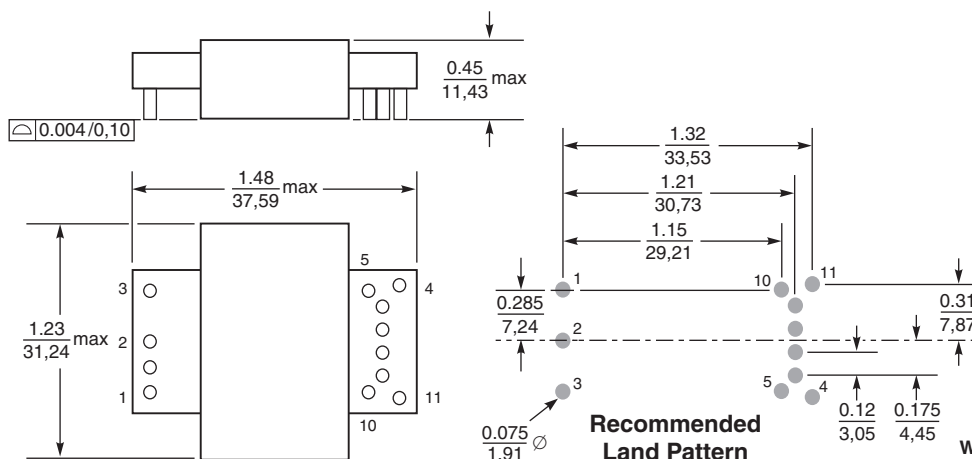
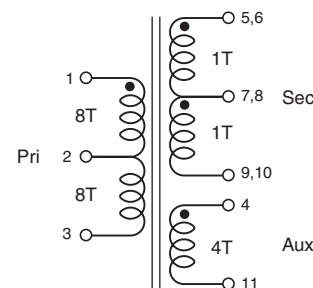
Part number ¹	Output power (W)	Input voltage range (V)	Output voltage (V)	Output current (A rms)	Primary inductance ¹ min (mH)	Leakage inductance ² max (μH)	DCR max (mOhms)	Pri/sec isolation (Vdc)
A9786-AL_	150	36–75	2.5	60.0	1.25	0.90	Primary: 62.5 (1–3) Secondary: 0.91 (5,6–9,10) 200 (4–11)	1100

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

A9786-ALD

Packaging: D = 13" machine-ready reel. EIA-481 embossed plastic tape (125 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.

- Inductance measured on an Agilent/HP 4284 between pins 1 and 3 at 250 kHz, 0.1 Vrms, 0 Adc.
 - Leakage inductance measured between pins 1 and 3 at 100 kHz, 0.1 Vrms, 0 Adc with all secondary pins shorted.
 - Operating temperature range: –40°C to +85°C.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Weight: 33.4 g

Terminations: Matte tin over nickel over brass

Tape and reel: 125/13" reel 56 mm tape



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Planar Magnetics for National Semiconductor LM5041

Output Inductor

Part number ¹	Inductance ² @ 0 Adc (μ H)	Inductance ² @ 7.5 Adc min (μ H)	DCR max (mOhms)	Isolation ³ (Vdc)	Isat ⁴ (A)	Irms ⁵ (A)
A9787-AL_	57 $\pm$ 7%	47.0	17.0	1100	8.1	12.0

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

A9787-ALD

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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 at 250 kHz, 0.1 Vrms.

3. Isolation measured from pins 1,2 to the core.

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

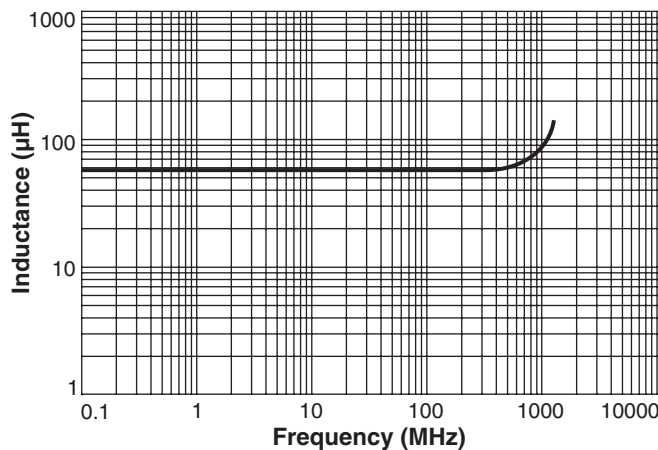
5. Current that causes a 40°C rise from 25°C ambient.

6. Operating temperature range: -40°C to +85°C.

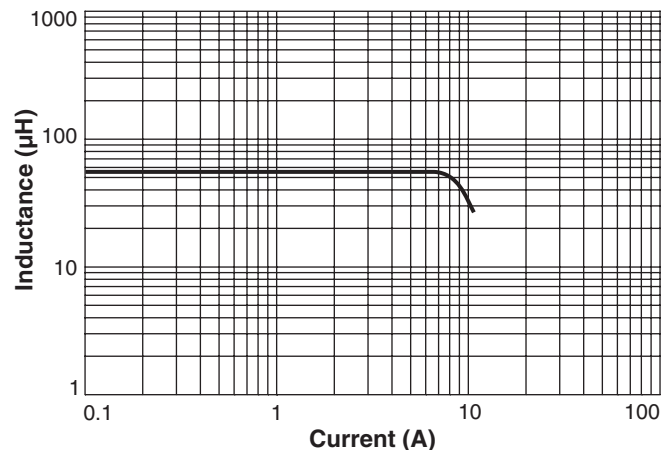
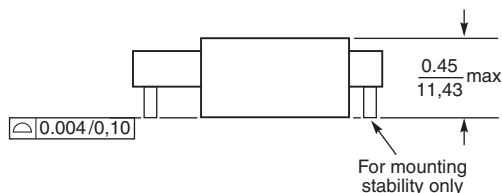
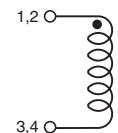
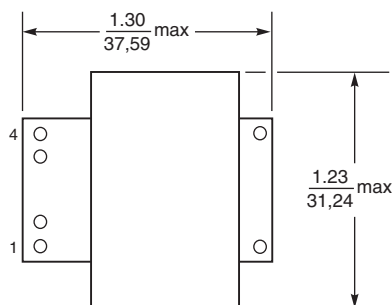
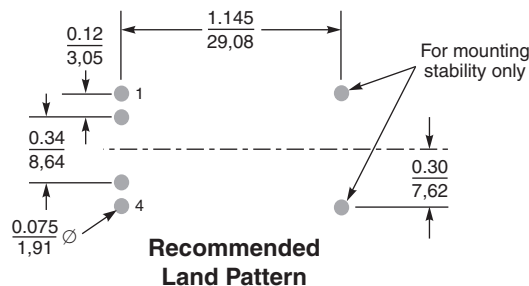
7. Electrical specifications at 25°C.

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

Typical L vs Frequency



Typical L vs Current



Weight: 31.0 g

Terminations: Matte tin over nickel over brass

Tape and reel: 125/13" reel 56 mm tape



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