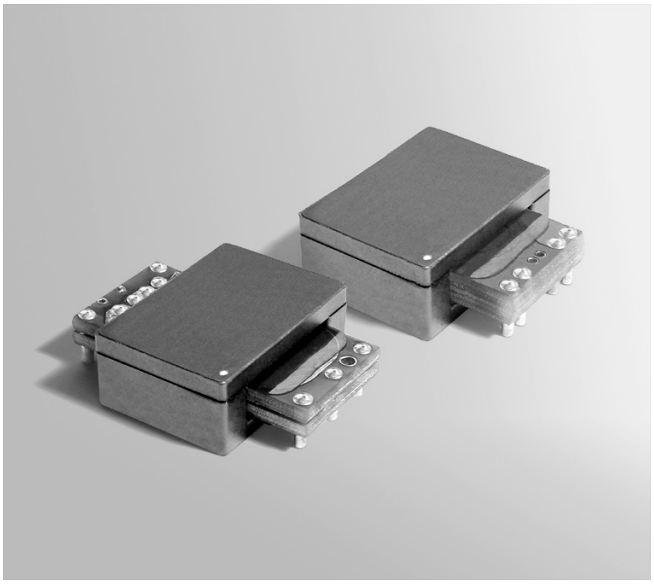
Planar Magnetics For National Semiconductor LM5041 IC



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

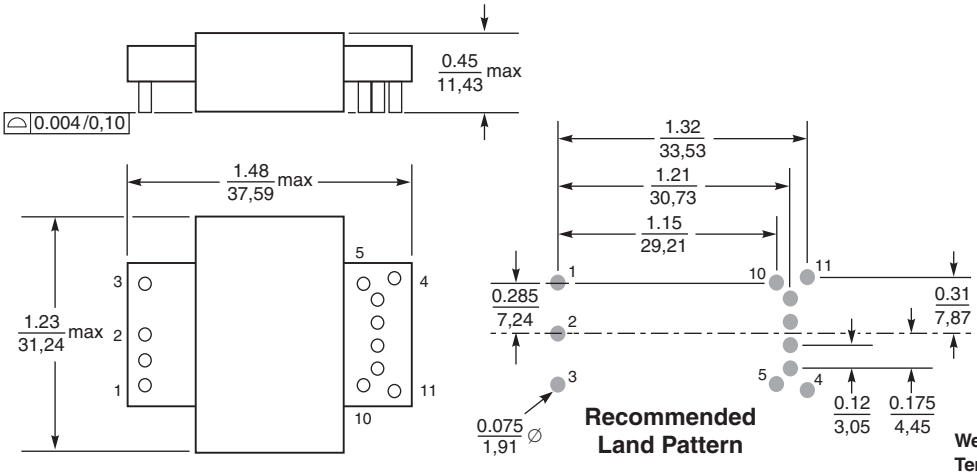
1. When ordering, please specify **packaging** code:

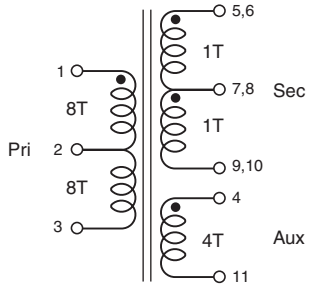
A9786-ALD

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.

2. Inductance measured on an Agilent/HP 4284 between pins 1 and 3 at 250 kHz, 0.1 Vrms, 0 Adc.
3. Leakage inductance measured between pins 1 and 3 at 100 kHz, 0.1 Vrms, 0 Adc with all secondary pins shorted.
4. Operating temperature range: –40°C to +85°C.
5. 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

Coilcraft
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Planar Magnetics for National Semiconductor LM5041

Output Inductor

Part number[1]	Inductance[2] @ 0 Adc (µH)	Inductance[2] @ 7.5 Adc min (µH)	DCR max (mOhms)	Isolation[3] (Vdc)	Isat[4] (A)	Irms[5] (A)
A9787-AL_	57 ±7%	47.0	17.0	1100	8.1	12.0

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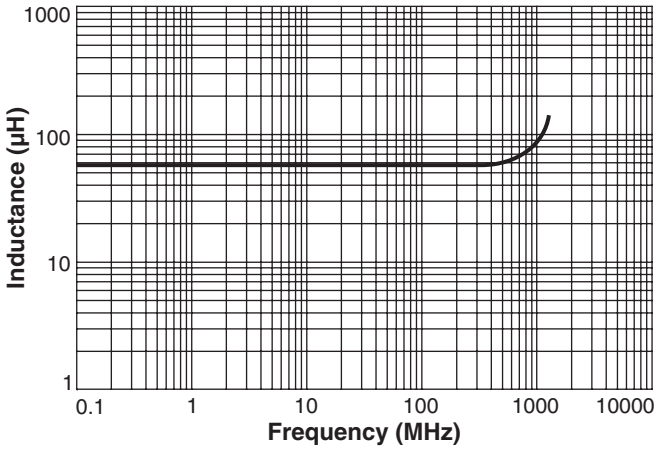
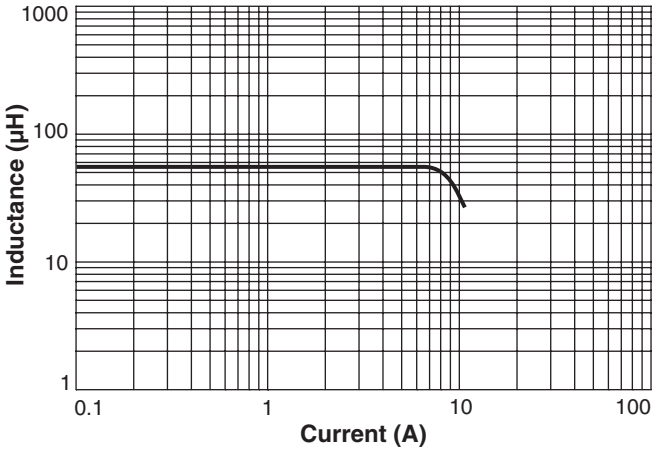
2. Inductance measured on an Agilent/HP 4284 at 250 kHz, 0.1 Vrms.
3. Isolation measured from pins 1,2 to the core.
4. DC current at which inductance drops 10% (typ) from its value without current.
5. Current that causes a 40°C rise from 25°C ambient.
6. Operating temperature range: –40°C to +85°C.
7. Electrical specifications at 25°C.

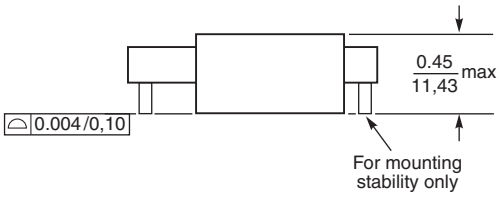
Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

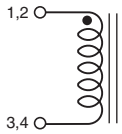
Typical L vs Frequency

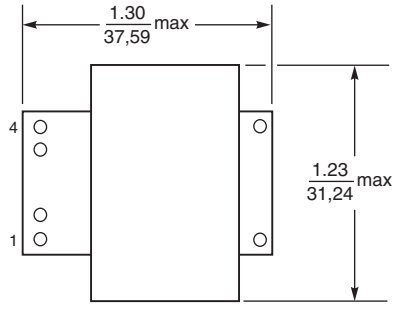


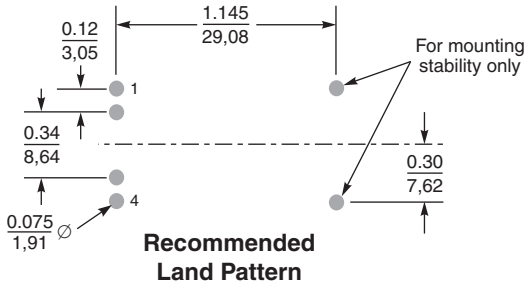
Typical L vs Current











Recommended Land Pattern

Weight: 31.0 g
Terminations: Matte tin over nickel over brass
Tape and reel: 125/13″ reel 56 mm tape

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