## NEWA SMT Planar Transformers <sup>For Applications</sup> up to 140 Watts



The PL140 surface mount planar transformers are rated for 140 Watts and are designed to operate at frequencies as high as 500 kHz. They are available in 15 turns ratios and six different schematics.

These transformers are ideal for use in high-current power supply applications such as open loop intermediate bus converters (IBC) and closed loop voltage mode converters. They are designed for use with nominal –48 V input. Output voltages depend on the the turns ratio, duty cycle and circuit topology. They offer high efficiency and feature excellent DCR, very low leakage inductance and 1500 Vdc primary to secondary isolation.

Coilcraft can design custom planar transformers with different turns ratios and with an auxiliary winding to meet your specific requirements.

Part	Primary turns			Primary inductance <sup>1</sup>	Leakage inductance <sup>2</sup>	DCR max (mOhms)		Schematics	
number	<b>N</b> 1	N <sub>2</sub>	Schem.	min (µH)	max (µH)	Primary	Secondary		
PL140-100	4	4	А	120.0	0.35	12.0 (2-3), 12.0 (3-4)	4.0 (6-10)		30 7 C
PL140-101	9		В	152.0	0.35	32.8 (2-4)	4.0 (6-10)	Α	
PL140-102	5	5	А	188.0	0.35	20.8 (2-3), 20.8 (3-4)	4.0 (6-10)		
PL140-103	11		В	227.0	0.35	48.8 (2-4)	4.0 (6-10)		
PL140-104	6	6	А	270.0	0.45	28.0 (2-3), 28.0 (3-4)	4.0 (6-10)		20
PL140-105	4	4	С	120.0	0.35	12.0 (2-3), 12.0 (3-4)	0.5 (6-7), 0.5 (9-10)		
PL140-106	9		D	152.0	0.35	32.8 (2-4)	0.5 (6-7), 0.5 (9-10)	D	, <b>3</b> 61
PL140-107	5	5	С	188.0	0.35	20.8 (2-3), 20.8 (3-4)	0.5 (6-7), 0.5 (9-10)	D	
PL140-108	11		D	227.0	0.50	48.8 (2-4)	0.5 (6-7), 0.5 (9-10)		
PL140-109	6	6	С	270.0	0.60	28.0 (2-3), 28.0 (3-4)	0.5 (6-7), 0.5 (9-10)		5 000 SIL
PL140-110	4	4	E	120.0	0.35	12.0 (2-3), 12.0 (3-4)	1.0 (6-8), 1.0 (9-10)		<sup>2</sup> N1 2
PL140-111	9		F	152.0	0.35	32.8 (2-4)	1.0 (6-8), 1.0 (9-10)	0	್ಕ <sup>್ಷ</sup> ್ಟ್ ನಿ [೯ 1
PL140-112	5	5	Е	188.0	0.35	20.8 (2-3), 20.8 (3-4)	1.0 (6-8), 1.0 (9-10)	C	4 ~ <b>3</b>
PL140-113	11		F	227.0	0.35	48.8 (2-4)	1.0 (6-8), 1.0 (9-10)		
PL140-114	6	6	E	270.0	0.45	28.0 (2-3), 28.0 (3-4)	1.0 (6-8), 1.0 (9-10)		5 (opt) <b>9</b>
1. Inductance m	neasured	on ai	n Agilent/HF	P 4284 betweer	n pins 2 and 4 a	at 200 kHz, 0.1 Vrms, 0 Ad	lc.		

2. Leakage inductance measured between pins 2 and 4 at 100 kHz, 0.1 Vrms, 0 Adc with all secondary pins shorted.

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

4. Electrical specifications at 25°C.

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

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## NEWA PL140 Series SMT Planar Transformers

## Dimensions





Note: Pad for pin 3 not necessary for schematics B, D and F. Pad for pin 8 is not necessary for schematics C and D. Pads 1 and 5 are only needed for optional auxiliary winding.

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

 For packaging data see Tape and Reel Specifications section.

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