



Bourns Releases New Planar Transformers

Model PLR Series

Riverside, California – January 8, 2024 – Bourns Custom Magnetics Product Line is pleased to introduce the new [Model PLR Series Planar Transformer Series](#). These new planar transformers are ideal for low profile, 25 watt PoE applications requiring a DC-DC transformer.

The new Model PLR Series Planar Transformers are surface mount forward converter transformers that provide 25 W power with a low maximum leakage inductance of 0.216 μH . Output voltages are 5 V at 5 A or 12 V at 2.1 A, and the withstand Hi-Pot rating is 1500 VDC. The operating temperature range is from $-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$ and the series is RoHS compliant*.

The Bourns® Model PLR Series is suitable to be used in various applications such as PoE applications, remote microcomputer powering applications, industrial power systems, Switched-Mode Power Supplies (SMPS), LED lighting, and other forward converter transformer applications.

Bourns Part Number	Primary Inductance ¹ (6-7) Min. (μH)	Leakage Inductance ¹ (6-7) w/ (1,3,4,5) shorted Max. (μH)	DCR Max. ($\text{m}\Omega$)			Turns Ratio @ 20 kHz, 1 V (NP1:NP2:NS)	Hi-Pot (Pri-Sec) Ref. @ 1 sec. / 3 mA	Hi-Pot (Coil-Core) Ref.	Main Output
			(6-7)	(4-5)	(1-3)				
PLR025-EI22A05S	85	216	120	450	11.5	5 : 5 : 2	1500 VDC	750 VDC	5 V / 5 A
PLR025-EI22A12S			140	510	90	5 : 5 : 5			12 V / 2.1 A

Note:

1. Measuring conditions 250 kHz, 1 V

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Samples and production quantities are now available.

For additional details on Bourns® Planar Transformers, visit the Bourns website at www.bourns.com/products/magnetic-products/transformers-planar.

If you have questions or need additional information, please feel free to contact [Bourns Customer Service/Inside Sales](#).

Features

- Low leakage inductance from 0.216 μ H max.
- Low height profile
- DC-DC transformer
- Surface mount
- Operating temperature: -40 °C to +125 °C
- RoHS compliant*

Applications

- Industrial power systems
- Switched-Mode Power Supplies (SMPS)
- LED lighting
- Battery Management Systems (BMS)
- Forward transformer for PoE applications

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.