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 °C to +125 °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.

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Primary Inductance† (6-7) Min. (μH) w/ (1,3,4,5) shorted Max. (μH)</th>
<th>Leakage Inductance† (6-7) (4-5) (1-3) (NP1:NP2:NS)</th>
<th>DCR Max. @ 20 kHz, 1 V</th>
<th>Turns Ratio @ 1 sec. / 3 mA</th>
<th>Hi-Pot (Pri-Sec) Ref.</th>
<th>Hi-Pot (Coll-Core) Ref.</th>
<th>Main Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLR025-EI22A05S</td>
<td>85</td>
<td>216</td>
<td>120</td>
<td>5:5:2</td>
<td>1500 VDC</td>
<td>750 VDC</td>
<td>5 V / 5 A</td>
</tr>
<tr>
<td>PLR025-EI22A12S</td>
<td>140</td>
<td>510</td>
<td>90</td>
<td>5:5:5</td>
<td></td>
<td></td>
<td>12 V / 2.1 A</td>
</tr>
</tbody>
</table>

*Note:*
1. Measuring conditions 250 kHz, 1 V

~ Continued ~
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Features
- Low leakage inductance from 0.216 μH 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

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.