## Features
- 25 watt planar DC-DC transformer
- Forward converter topology
- Low leakage inductance
- Low profile component
- Surface mount
- Operating temperature: -40 °C to +125 °C
- RoHS compliant*

## Applications
- Industrial power supplies
- LED lighting
- PoE applications
- Battery Management Systems (BMS)
- Switched-Mode Power Supplies (SMPS)

### General Specifications

<table>
<thead>
<tr>
<th>Operating Temperature</th>
<th>-40 °C to +125 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Temperature</td>
<td>-40 °C to +105 °C</td>
</tr>
<tr>
<td>Output Power</td>
<td>25 W</td>
</tr>
<tr>
<td>Transformer Input Voltage</td>
<td>35-57 VDC</td>
</tr>
<tr>
<td>Switching Frequency</td>
<td>250 kHz</td>
</tr>
<tr>
<td>Moisture Sensitivity Level</td>
<td>1</td>
</tr>
</tbody>
</table>

### Additional Information

Click these links for more information:
- [PRODUCT LIBRARY](#)
- [INVENTORY](#)
- [SAMPLES](#)
- [CONTACT](#)

### Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Primary Inductance¹ (6-7) Min. (μH)</th>
<th>Leakage Inductance² (6-7) w/ (1,3,4,5) shorted Max. (nH)</th>
<th>DCR Max. (mΩ) @ 20 kHz, 1 V</th>
<th>Turns Ratio @ 20 kHz, 1 V</th>
<th>Hi-Pot (Pri-Sec) Ref. @ 1 sec. / 3 mA</th>
<th>Hi-Pot (Coil-Core) Ref.</th>
<th>Main Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLR025-EI22A05S</td>
<td>85</td>
<td>120 (6-7), 450 (4-5), 11.5 (1-3)</td>
<td>1500 VDC</td>
<td>5 : 5 : 2</td>
<td>5 V / 5 A</td>
<td>750 VDC</td>
<td>5 V / 2.1 A</td>
</tr>
<tr>
<td>PLR025-EI22A12S</td>
<td>140</td>
<td>140 (6-7), 510 (4-5), 90 (1-3)</td>
<td>120 VDC</td>
<td>5 : 5 : 5</td>
<td>12 V / 2.1 A</td>
<td>90 VDC</td>
<td>12 V / 2.1 A</td>
</tr>
</tbody>
</table>

Note:
1. Measuring conditions 250 kHz, 1 V

### Materials

- PCB .................. FR4 Tg135C
- Tape .................. KAPTON #201
- Core ..................... DMR44
- Glue ..................... Silicone

### How To Order

- **Model**: PLR = Planar Transformer
- **Power Rating**: 025 = 25 W
- **Core and Size**: EI22 = EIW 21.8
- **Sub-series**: A = A Series
- **Output Voltage**: 05 = 5 V
- **PCB type**: S = SMD

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PLR Series – Planar Transformer

Product Dimensions

Unless otherwise specified, all tolerances are ± 0.25 / (.010)

Lead-Free Soldering Profile

Recommended Layout

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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PLR Series – Planar Transformer

Electrical Schematic

Primary and secondary windings to be connected in parallel on PCB.

Packaging Specifications

300 pcs. per reel, 3 reels per carton
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