

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)

PLR Series – Planar Transformer

General Specifications

Operating Temperature.....	-40 °C to +125 °C
Storage Temperature.....	-40 °C to +105 °C
Output Power.....	25 W
Transformer Input Voltage.....	35-57 VDC
Switching Frequency.....	250 kHz
Moisture Sensitivity Level.....	1

Additional Information

Click these links for more information:



Electrical Specifications @ 25 °C

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. (mΩ)			Turns Ratio @ 20 kHz, 1 V (NP1:NP2:NS)	Hi-Pot (Pri-Sec) Ref.	Hi-Pot (Coil-Core) Ref.	Main Output
			(6-7)	(4-5)	(1-3)		@ 1 sec. / 3 mA		
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

Materials

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

How To Order

	PLR 025 - EI22 A 05 S
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	



WARNING Cancer and Reproductive Harm -
www.P65Warnings.ca.gov

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

Specifications are subject to change without notice.

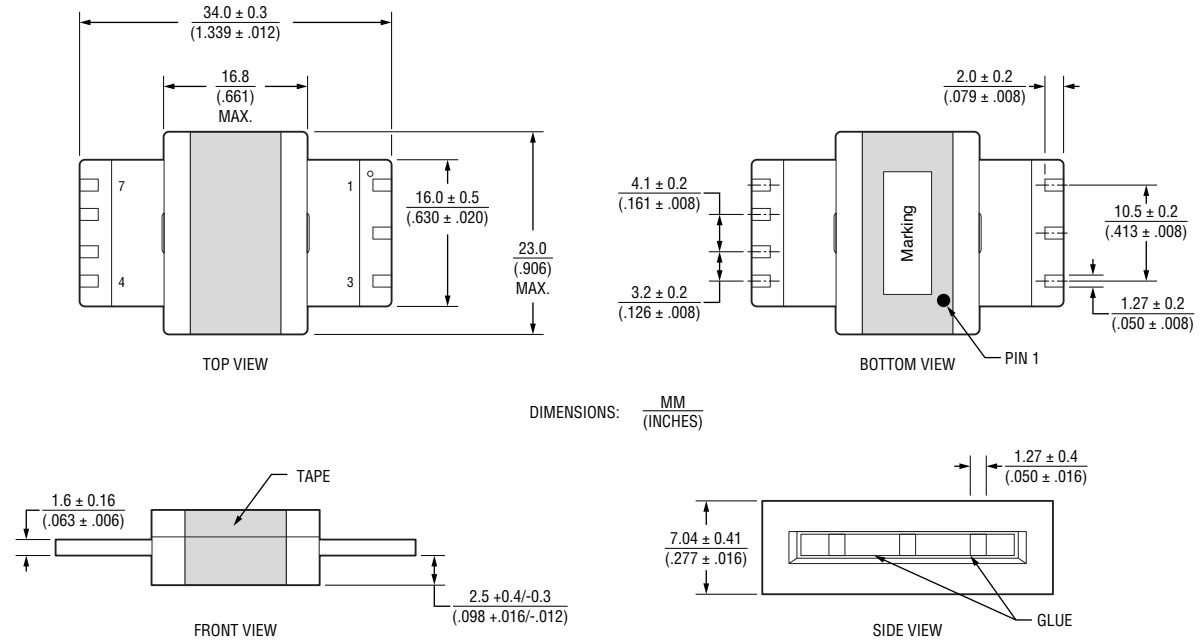
Users should verify actual device performance in their specific applications.

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PLR Series – Planar Transformer



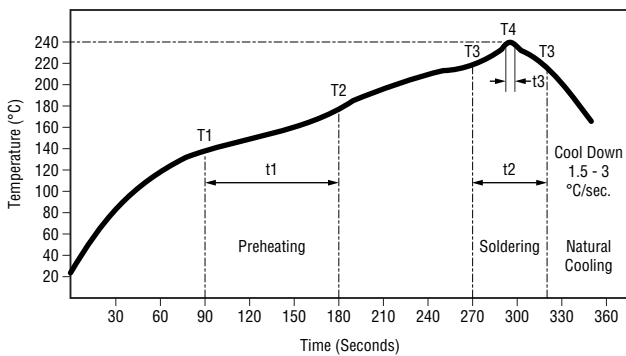
Product Dimensions



DIMENSIONS: $\frac{MM}{(INCHES)}$

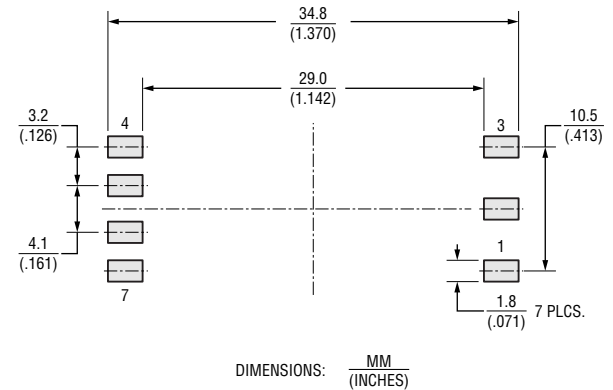
Unless otherwise specified, all tolerances are $\pm 0.25 / (.010)$

Lead-Free Soldering Profile



Preheating			Soldering		Peak	
Temp.	Time	Temp.	Time	Temp.	Time	
T1	T2	t1	T3	t2	T4	t3
140 °C	180 °C	60-120 sec.	220 °C	40-70 sec.	240-250 °C	5 sec.

Recommended Layout



DIMENSIONS: $\frac{MM}{(INCHES)}$

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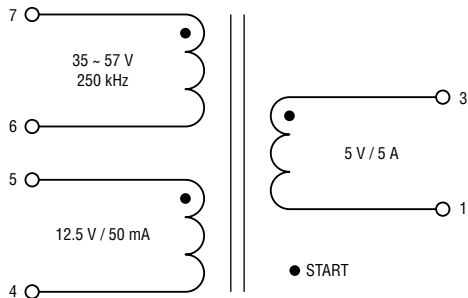
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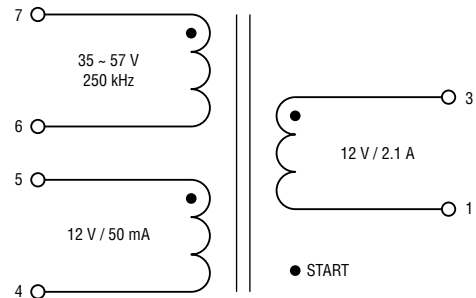
BOURNS®

Electrical Schematic

PLR025-EI22A05S



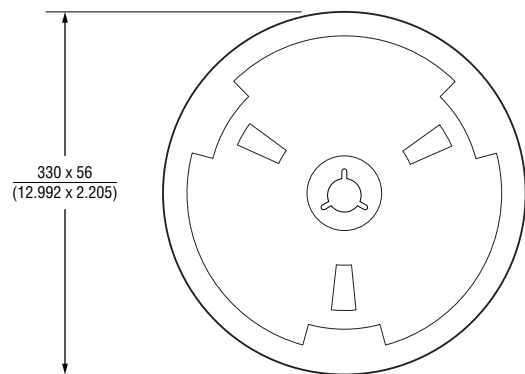
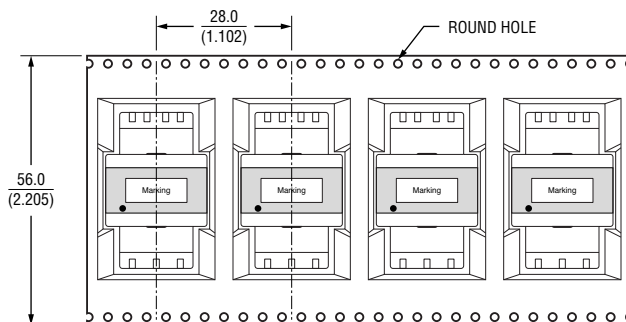
PLR025-EI22A12S



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

Packaging Specifications

300 pcs. per reel, 3 reels per carton



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

www.bourns.com

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