**Features**
- IEEE 802.3 Ethernet compatible
- Compatible with 10G Base-T
- PoE+ capable
- Discrete transformers and common mode chip inductors for flexible PCB layout
- Pairing common mode chip inductor SRF2012-900YA for EMI reduction
- Expanded temperature range: -40 to +85 °C
- RoHS compliant* and halogen free**

**Electrical Specifications @ 25 °C**

- Inductance (Pin 1-2 & 6-7 / short 3-4) .. 120 µH min. @ 100 kHz, 0.1 V, 0 mA
- Insertion Loss 1-500 MHz .................. -2.0 dB typ. .......................... -3.0 dB max.
- Capacitance (Pin 3-5 / short 3-4) .................. 21 pF typ.
- PoE+........................................... 700 mA
- Hi-Pot (Pin 1-6, short 3-4) .................................... 1500 V ac, 60 s
- Operating Temperature: -40 °C to +85 °C
- Storage Temperature: -40 °C to +85 °C

**Additional Information**
Click these links for more information:

- PRODUCT
- TECHNICAL LIBRARY
- INVENTORY
- SAMPLES
- CONTACT

**Product Dimensions – Top View**

**How To Order**

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**Tape & Reel** .......................... 2000 pcs./reel

**Terminal Dimensions – Top View**

**Packaging Specifications**

- Tape & Reel .................. 2000 pcs./reel

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

** Bourns considers a product to be “halogen free” if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.
SM453230-121N7YP - 10 GbE Chip-LAN Transformer

Recommended Layout

Electrical Schematic

Solder Paste Stencil Aperture Recommendation

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Solder Reflow Recommendations

**Profile Feature** | **Pb-Free Assembly**
--- | ---
Preheat / Soak: |  
Temperature Min. (T_{smin}) | 150 °C
Temperature Max. (T_{smax}) | 200 °C
Time (t_{s}) from (T_{smin} to T_{smax}) | 60–120 seconds
Ramp Up Rate (T_{L} to T_{P}) | 3 °C / second max.
Liquidous Temperature (T_{L}) | 217 °C
Time (t_{L}) maintained above T_{L} | 60–150 seconds
Peak Package Body Temperature (T_{P}) | 250 °C
Time (t_{P})* within 5 °C of the specified classification temperature (T_{C}) | 30 seconds*
Ramp Down Rate (T_{P} to T_{L}) | 6 °C / second max.
Time 25 °C to Peak Temperature | 8 minutes max.

*Tolerance for peak profile temperature (T_{P}) is defined as a supplier minimum and a user maximum.

Packaging Specifications

**Dimensions:**

- **Cover Tape:** 330 mm (12.992"")
- **Embossed Carrier:** 100 ± 2 mm (3.937 ± .079")
- **Pin 1:** 8.00 ± 0.10 mm (0.315 ± .004")
- **Dimensions:** 2.0 ± 0.5 mm (.079 ± .020")
- **User Direction of Feed:**
  - Width: 3.60 ± 0.10 mm (.142 ± .004")
  - Angle: 4°
  - QTY: 2000 PCS. PER REEL

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