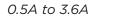
# **SMT Common Mode Inductors**













- @ Pick and place compatible
- Rated voltage 250Vac
- @ Low RFI toroid
- @ Tape & Reel packaging available

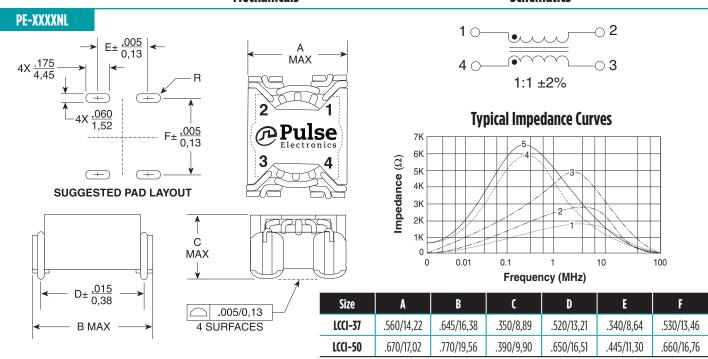
| Electrical Specifications @ 25°C – Operating Temperature –40°C to +125°C |                        |                      |                   |                         |                    |              |                          |                     |  |  |  |
|--|------------------------|----------------------|-------------------|-------------------------|--------------------|--------------|--------------------------|---------------------|--|--|--|
| Part <sup>1, 2</sup><br>Number   | Inductance<br>(mH MIN) | <b>Irated</b><br>(A) | DCR (MAX)<br>(mΩ) | Typical<br>SRF<br>(MHz) | Impedance<br>Curve | Size<br>Code | <b>Weight</b><br>(Grams) | Quantity<br>In Tube |  |  |  |
| PE-53914NL   | 13.2                   | 0.50                 | 850               | 0.3                     | 5                  | LCCI-37      | 2.4                      | 30                  |  |  |  |
| PE-53913NL   | 6.0                    | 1.00                 | 450               | 0.5                     | 4                  | LCCI-37      | 2.4                      | 30                  |  |  |  |
| PE-53912NL   | 1.8                    | 2.50                 | 80                | 2.2                     | 3                  | LCCI-50      | 5.2                      | 30                  |  |  |  |
| PE-53911NL   | 0.9                    | 1.50                 | 60                | 2                       | 2                  | LCCI-37      | 2.5                      | 30                  |  |  |  |
| PE-53910NL   | 0.6                    | 3.60                 | 50                | 4                       | 1                  | LCCI-50      | 5.3                      | 30                  |  |  |  |

#### Notes:

- 1. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PE-53914L becomes PE-53914LT). Pulse complies to industry standard tape and reel specification EIA481.
- 2. The "NL" suffix indicates an RoHS-compliant part number. Non-NL suffixed parts are not necessarily RoHS compliant, but are electrically and mechanically
- equivalent to NL versions. If a part number does not have the "NL" suffix, but an RoHS compliant versions is required, please contact Pulse for availability.
- 3. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

### **Mechanicals**

### **Schematics**



## SMT Common Mode Inductors

0.5A to 3.6A



### **Application**

These transformers have been designed for use at the interface between line driver and receiver and the interconnecting medium in Digital Audio Data Transmission Systems according to AES 3-199X or IEC 958. In such systems, two channels of periodically sampled and uniformly quantized audio signals are transmit on a single shielded twisted pair.

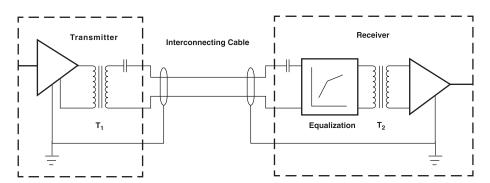
The electrical parameters of the interface are based on those of CCITT V.II or balanced voltage digital circuits which allow signal transmission up to a few hundred meters. The isolation transformers are essential in improving the balance of the transmitter and the receiver circuitry, and reducing common mode noise and EMI.

These transformers are recommended for use with the Cirrus Logic CS8401, CS8402, CS8403 and CS8404 "Digital Audio Interface Transmit Device. The schematic below represents an implementation of transmit and receive circuits using isolation transformers at both ends. Equalization in the receiver may permit to increase the length of the interconnecting cable.

### **Applicable Documents**

AES 3-1985 (ANSI S4.40-1985), AES 3-199XDraft, IEC 958, CP-340, EBU 3250

### **Application Chart**



T<sub>1</sub>, T<sub>2</sub>: PE-65612 or PE-65812

## For More Information

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