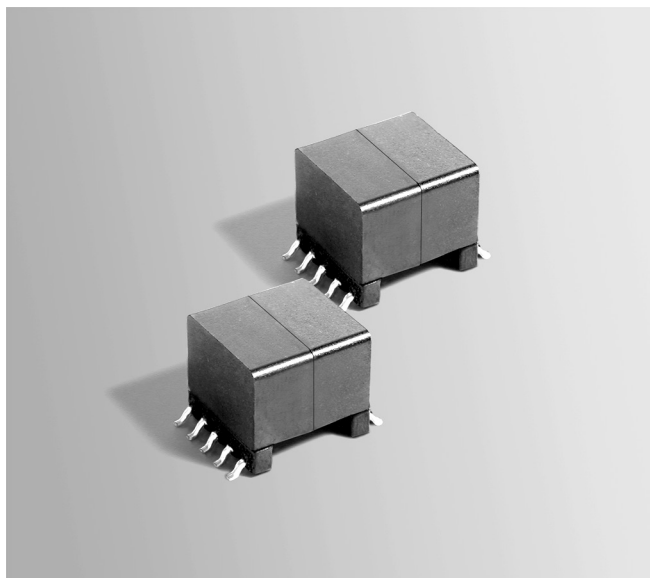


# xDSL Interface Transformers

For LT1794, LT1795  
and LT1886



This product is not RoHS-compliant. Contact Coilcraft for current status or possible alternatives.

These transformers provide coupling and line isolation for xDSL interfaces using the Linear Technology LT1794, LT1795 and LT1886 amplifiers.

They feature very low leakage inductance, stable primary inductance from -40°C to +85°C and longitudinal balance optimized for the best overall performance at ADSL and HDSL2 transmission speeds.

In addition to the standard models shown, Coilcraft can provide custom transformers with other turn ratios.

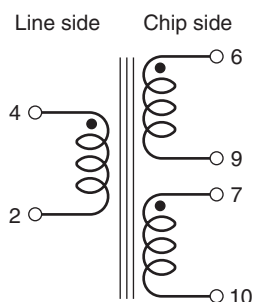
For free evaluation samples or to discuss custom designs, contact Coilcraft or visit [www.coilcraft.com](http://www.coilcraft.com).

**Tape and reel** 175 per 13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 28 mm pocket spacing, 12.93 mm pocket depth

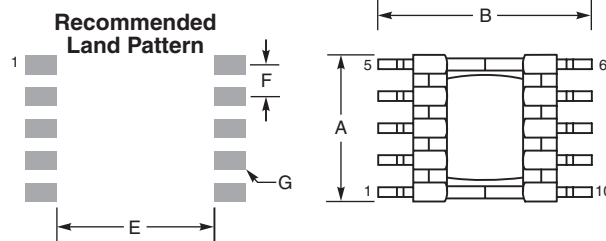
| Part number | Style | Chip set       | Line side inductance (mH) | Leakage inductance (μH) max | DCR max (Ohms)    |            |
|-------------|-------|----------------|---------------------------|-----------------------------|-------------------|------------|
|             |       |                |                           |                             | Chip side         | Line side  |
| X8390-A     | SMT   | LT1794, LT1886 | 0.368 ±5%                 | 11                          | 0.841 (6-9, 7-10) | 1.95 (4-2) |
| X8502-A     | SMT   | LT1794, LT1886 | 0.368 ±5%                 | 11                          | 0.895 (6-9, 7-10) | 1.70 (4-2) |
| X8505-A     | SMT   | LT1886         | 0.368 ±5%                 | 11                          | 0.750 (6-9, 7-10) | 1.85 (4-2) |
| X8504-A     | SMT   | LT1795         | 0.368 ±5%                 | 11                          | 0.875 (6-9, 7-10) | 1.75 (4-2) |

| Part number | Dielectric strength (V) | Turns ratio <sup>1</sup> line:chip | Longitudinal balance (dB) min | Designed to meet |
|-------------|-------------------------|------------------------------------|-------------------------------|------------------|
| X8390-A     | 1500                    | 1:1                                | 45 (20 kHz - 1.1 MHz)         | UL 1459, 1950    |
| X8502-A     | 1500                    | 1:1.2                              | 42 (20 kHz - 1.1 MHz)         | UL 1459, 1950    |
| X8505-A     | 1500                    | 1:1.5                              | 42 (20 kHz - 1.1 MHz)         | UL 1459, 1950    |
| X8504-A     | 1500                    | 1:1.4                              | 42 (20 kHz - 1.1 MHz)         | UL 1459, 1950    |

1. Turns ratio is with the chip side windings connected in series.
2. All electrical specifications referenced to line side.
3. Operating temperature range -40°C to +85°C.
4. Electrical specifications at 25°C.



Chip side windings to be connected in series on the PC board



| A max | B max | C max | E     | F typ | G typ         |
|-------|-------|-------|-------|-------|---------------|
| 0.530 | 0.699 | 0.500 | 0.590 | 0.098 | 0.061 × 0.050 |
| 13,46 | 17,75 | 12,70 | 14,99 | 2,50  | 1,55 × 1,27   |



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