**PLC-LW-002**

**2-30MHz 1:1 15µH**

**APPLICATIONS**
- Automotive EV/PHV AC/DC onboard battery chargers

**FEATURES**
- Signal transformer for HPGP HomePlug Green PHY™ PLC modems
- For power line communication devices acc. to IEC 15118 standard
- For charging systems according to IEC 61851-1
- Insertion loss < 1dB on 2-30MHz (100-120 Ohms)
- SMD coil-former technology
- Wide operating temperature range -40 to +125°C
- UL94 and RoHS materials
- Designed for AEC-Q200
- Weight: approx 3grams

**OPERATION**
- PLC signal transmission
- OBC with communication with the charging station

**SPECIFICATIONS**

**INDUCTANCE at 25°C**

\[
L_1 = L_2 = L_3 = L_4 = 9\mu H \text{ MIN} \ (15\mu H \text{ TYP})
\]

**TURN-RATIO**

\[
N_1 : N_2 : N_3 : N_4 = 1:1:1
\]

**DC RESISTANCE at 25°C**

\[
DRC_{1-8} = DCR_{3-6} = DCR_{4-5} = 90m\Omega \text{ MAX} \ (70m\Omega \text{ TYP})
\]

**LEAKAGE INDUCTANCE**

\[
L_{LK} (100kHz/1Vac) = 0.25\mu H \text{ MAX} \ (0.1\mu H \text{ TYP})
\]

**STRAY CAPACITANCE**

\[
C_{PS} (100kHz/1Vac) = 7pF \text{ MAX} \ (5pF \text{ TYP})
\]

**DIELECTRIC STRENGTH**

- Between Windings: 500Vac (50Hz/1mA/1min)

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**TYPICAL INDUCTANCE**

**ELECTRICAL DIAGRAM**

**DIMENSIONS (mm)**

**ELECTRICAL SPECIFICATIONS**

**NEW**