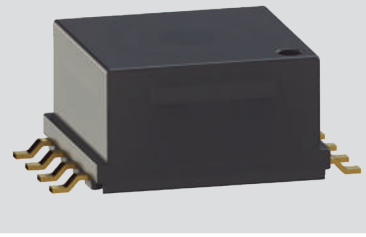


New

PLC-002

2-30MHz 1:1 15μH

INDUCTIVE COMPONENTS / PLC TRANSFORMERS



APPLICATIONS

- › Automotive EV/PHV AC/DC onboard battery chargers

01 FEATURES

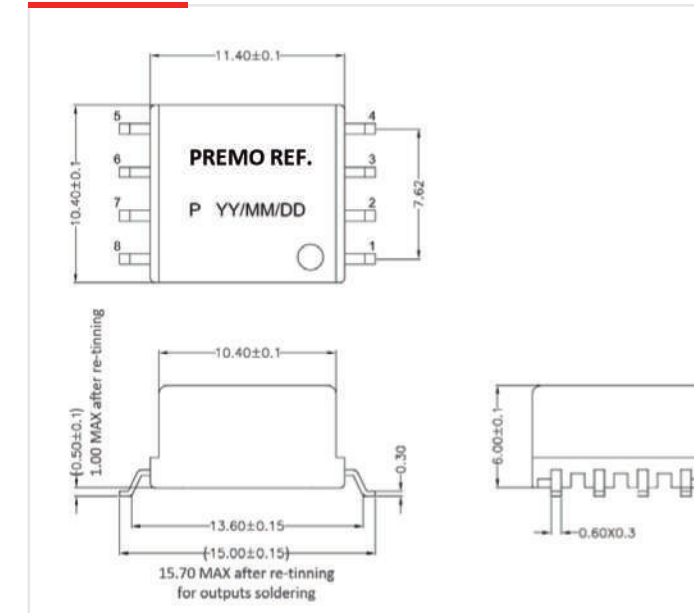
- › Signal transformer for HPGP (HomePlug Green PHY™) PLC modems
- › For power line communication devices acc. to IEC 15118 standard
- › For charging systems according to IEC 61851-1
- › PTH technology
- › Wide operating temperature range -40 to +125°C
- › UL94 and RoHS materials
- › AEC-Q200 qualified
- › Weight : approx 2grams

02 OPERATION

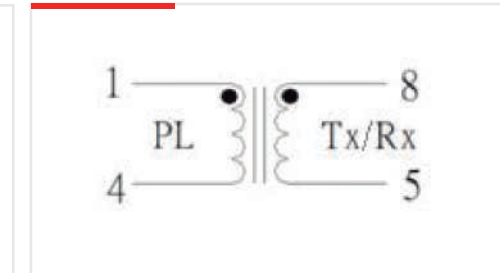
- › PLC signal transmission
- › OBC with communication with the charging station

03 SPECIFICATIONS

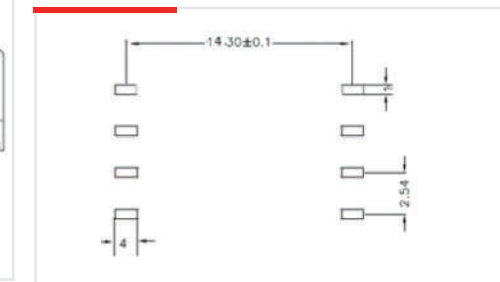
DIMENSIONS



ELECTRICAL DIAGRAM



RECOMMENDED PAD-LAYOUT



ELECTRICAL SPECIFICATIONS

INDUCTANCE at 25°C

$$L_{1-4} = L_{5-8} \quad (2\text{MHz}/1\text{Vac}) \quad 10\mu\text{H MIN (15}\mu\text{H TYP)}$$

TURN-RATIO

$$N_{1-4} : N_{8-5} \quad (10\text{kHz}/1\text{Vac}) \quad 1:1$$

DC RESISTANCE at 25°C

$$\text{DCR}_{1-4} = \text{DCR}_{5-8} \quad 60\text{m}\Omega \text{ MAX (41m}\Omega \text{ TYP)}$$

LEAKAGE INDUCTANCE

$$L_{\text{LK}} \quad (100\text{kHz}/1\text{Vac}) \quad 0.25\mu\text{H MAX (0.1}\mu\text{H TYP)}$$

STRAY CAPACITANCE

$$C_{\text{PS}} \quad (100\text{kHz}/1\text{Vac}) \quad 2\text{pF MAX (0.3pF TYP)}$$

DIELECTRIC STRENGTH

$$\text{Between Windings} \quad 500\text{Vac (50Hz}/1\text{mA}/1\text{min)}$$

TYPICAL INDUCTANCE

