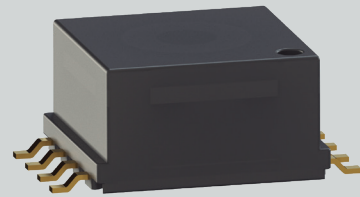


PLC-002

2-30MHz 1:1 15μH

INDUCTIVE COMPONENTS / PLC TRANSFORMERS



APPLICATIONS

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

01 FEATURES

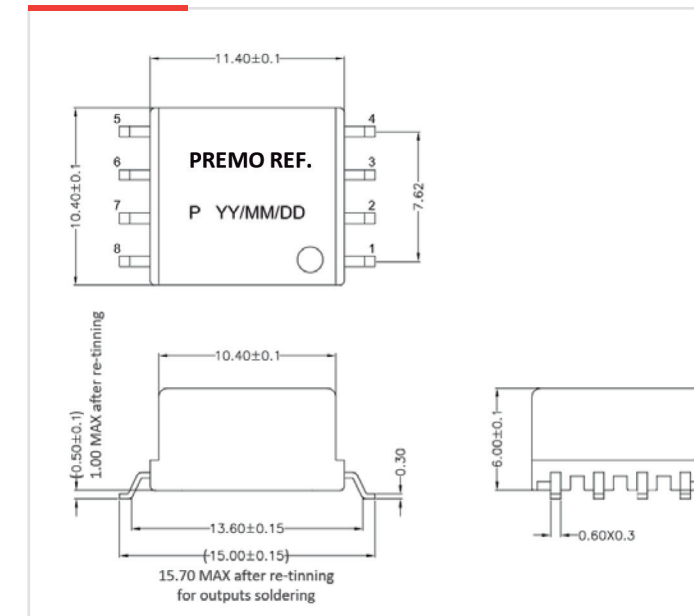
- › Signal transformer for HPGP (HomePlug Green PHY™) PLC modems
- › For power line communication devices acc. to IEC 15118 standard
- › For charging systems according to IEC 61851-1
- › PTH technology
- › Wide operating temperature range -40 to +125°C
- › UL94 and RoHS materials
- › AEC-Q200 qualified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

02 OPERATION

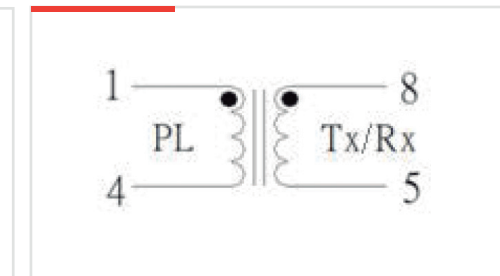
- › PLC signal transmission
- › OBC with communication with the charging station

03 SPECIFICATIONS

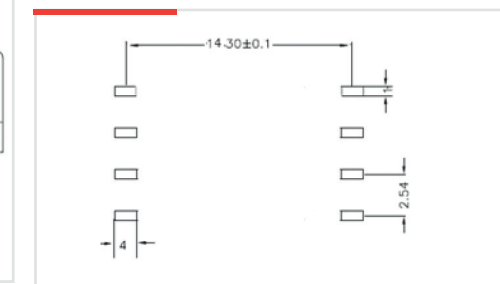
DIMENSIONS (mm)



ELECTRICAL DIAGRAM



RECOMMENDED PAD-LAYOUT



ELECTRICAL SPECIFICATIONS

INDUCTANCE at 25°C		
$L_{1-4} = L_{5-8}$ (2MHz/1Vac)		10μH MIN (15μH TYP)
TURN-RATIO		
$N_{1-4} : N_{8-5}$ (10kHz/1Vac)		1:1
DC RESISTANCE at 25°C		
$DCR_{1-4} = DCR_{5-8}$		60mΩ MAX (41mΩ TYP)
LEAKAGE INDUCTANCE		
L_{LK} (100kHz/1Vac)		0.25μH MAX (0.1μH TYP)
STRAY CAPACITANCE		
C_{PS} (100kHz/1Vac)		2pF MAX (0.3pF TYP)
DIELECTRIC STRENGTH		
Between Windings		500Vac (50Hz/1mA/1min)

TYPICAL INDUCTANCE

