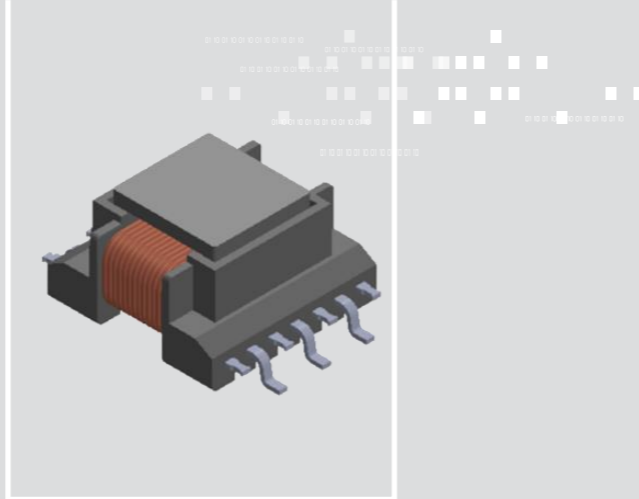


# PPTR - 001

## Isolated Push-Pull Transformer

INDUCTIVE COMPONENTS / PUSH - PULL TRANSFORMER



### APPLICATION

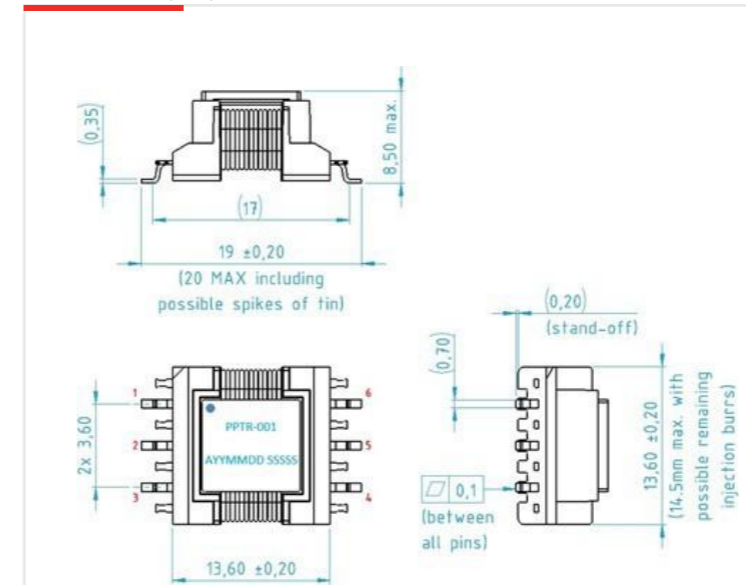
- > Automotive BMS in xEV (ex: TI SN6505A/B chips)

## 01 FEATURES

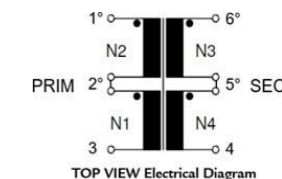
- > Isolated push-pull transformer for BMS in xEV
- > 1:1:2+2 turn-ratio
- > Input voltage 5Vdc TYP
- > Switching frequency 300-600kHz (450kHz TYP)
- > MAX Et product 13Vμs (unipolar 50%)
- > MAX current 300mA PRIM / 100mA SEC
- > Working voltage up to 1000Vdc MAX
- > Reinforced isolation IEC 61558-1/-2-16 (PD2)
- > Creepage distance > 10mm (CTI-I > 600V)
- > Wide operating temperature range -40 to +125°C
- > UL94 and RoHS materials
- > Design based on AEC-Q200D
- > Weight : approx. 3grams

## 02 SPECIFICATIONS

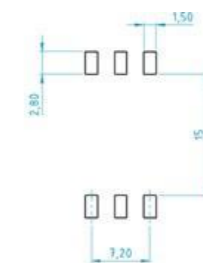
### DIMENSIONS (mm)



### ELECTRICAL DIAGRAM (Top View)



### RECOMMENDED PAD-LAYOUT



### ELECTRICAL SPECIFICATIONS

INDUCTANCE at 25°C	
$L_{1-3}$ (100kHz/0.1mVac)	90-170μH (130μH TYP)
TURN-RATIO	
$N_{6-4} : N_{1-3}$ (1-10kHz/1Vac)	2:1
DC RESISTANCE at 25°C	
$DCR_{1-3} / DCR_{4-6}$	0.6Ω MAX / 1.2Ω MAX
LEAKAGE INDUCTANCE	
$L_{LK}$ (100kHz/1Vac)	0.6μH MAX (0.4μH TYP)
STRAY CAPACITANCE	
$C_{p5}$ (100kHz/1Vac)	12pF MAX (8pF TYP)
DIELECTRIC STRENGTH	
Between PRIM/SEC Wdgs	5kVac (50Hz/3mA/1min)