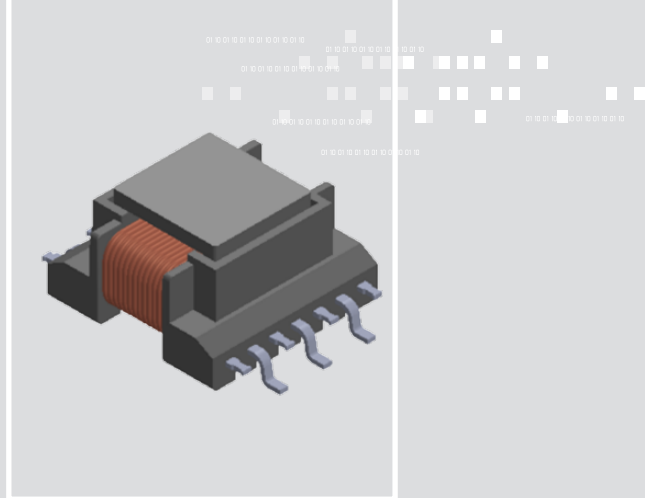


PPTR - 001

Isolated Push-Pull Transformer

INDUCTIVE COMPONENTS / PUSH - PULL TRANSFORMER



APPLICATION

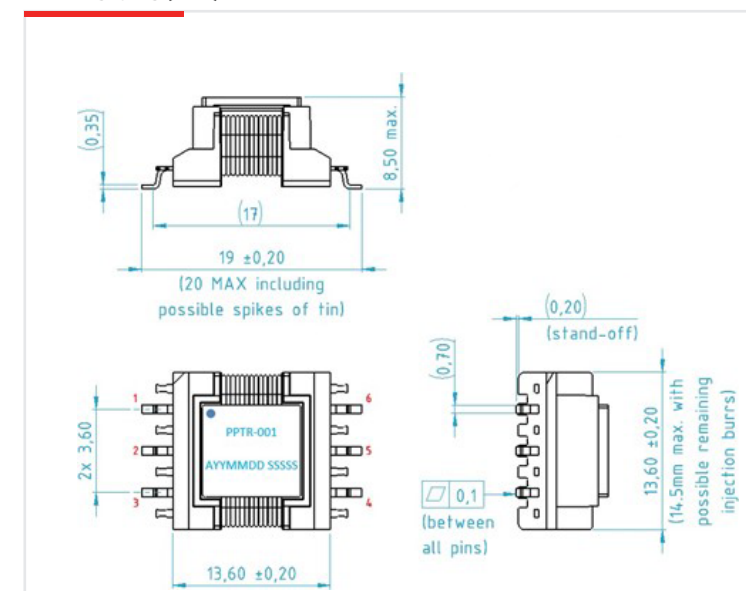
- › Automotive BMS in xEV (ex: TI SN6505A/B chips)

01 FEATURES

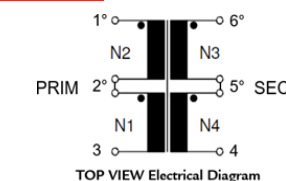
- › Isolated push-pull transformer for BMS in xEV
- › 1+1:2+2 turn-ratio
- › Input voltage 5Vdc TYP
- › Switching frequency 300-600kHz (450kHz TYP)
- › MAX Et product 13Vμs (unipolar 50%)
- › MAX current 300mA PRIM / 100mA SEC
- › Working voltage up to 1000Vdc MAX
- › Reinforced isolation IEC 61558-1/-2-16 (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

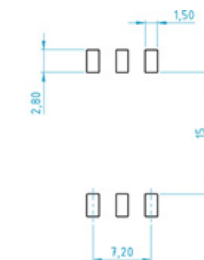
DIMENSIONS (mm)



ELECTRICAL DIAGRAM (Top View)



RECOMMENDED PAD-LAYOUT



ELECTRICAL SPECIFICATIONS

INDUCTANCE at 25°C	
L_{1-2} (100kHz/0.1mVac)	90-170μH (130μH TYP)
TURN-RATIO	
$N_{6-4} : N_{1-2}$ (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)