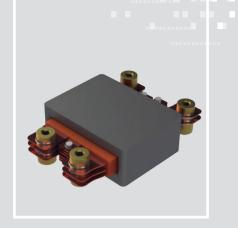
# **NPT-001**

## **Power Transformers for HEV Systems**

INDUCTIVE COMPONENTS / DCDC TRANSFORMERS





### **APPLICATIONS**

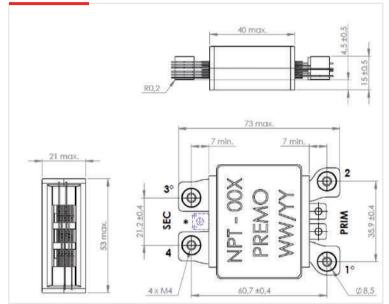
> Power Components for HEV Onboard Automotive SMPS

## FEATURES

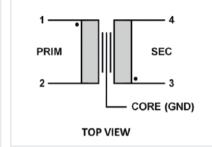
- > Design for high-performance automotive 2kW SMPS
- > Low-profile copper frames technology
- > Dedicated to 48V battery systems
- > Threaded M4 terminals ready for bus-bars
- > 3:2 turn-ratios proposed as standard
- > Working frequency from 80 to 150kHz
- > Low leakage inductance value
- > 2.5kV isolation between primary and secondary
- > Creepage distance > 3mm
- > High operating temperature range -40 to +155°C
- > UL94V-0 and RoHS materials
- > Design compliant with AEC-Q200 requirements
- > No thermal aging effect
- > Weight: approx. 210g

### SPECIFICATIONS

#### **DIMENSIONS**



### **ELECTRICAL DIAGRAM**



#### **ELECTRICAL SPECIFICATIONS**

IDC-link Input Voltage Vdc (V)	60-100
Typ Output Voltage (V)	36-60
Max Output Current (A)	55
Max Power(W)	2000
Switching Frequency (kHz)	80-100
Max Duty cycle	0.48
Recomended Topology	ZVS PS FB with current doubler
Mag. Inductance (μH)	> 90
Leakage Inductance (µH)	0.15
Turn Ratio (Pri:Sec)	3:2
Max Total Losses (W)	15