**LLC resonant 3.5 kW full-bridge transformer**

- Works with $L_r = 22\mu H$ and $C_r = 33nF$
- Frequency range 70-200kHz
- Reinforced insulation between prim/sec and with core
- UL94 and RoHS materials (F/155°C)
- Design based on AEC-Q200
- Weight: approx 350grams

**Vin** = 220-420Vdc / Vout = 200-430Vdc

**Ip** = 19Arms MAX / Is = 18.5Arms MAX

**Operating temperature** -40/+140°C with cooling (potting)

**APPLICATIONS**
- Automotive EV/PHV AC/DC onboard battery chargers

**FEATURES**

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**OPERATION**

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**SPECIFICATIONS**

- **INDUCTANCE at 25°C**
  - $L_1 = L_p (100kHz/1Vac)$
  - $130\mu H \pm 7.5%$

- **DC RESISTANCE at 25°C**
  - $R_1$
  - 17mΩ TYP (19mΩ MAX)
  - $R_2$
  - 13mΩ TYP (15mΩ MAX)

- **TURN-RATIO**
  - $N_1:N_2$
  - 1.4:1

- **LEAKAGE INDUCTANCE**
  - $L_{1lk} (100kHz/1Vac, N_2 shorted)$
  - 2µH MAX

- **DIELECTRIC STRENGTH**
  - $(N_1/N_2)/(CORE)$
  - 4kVac/50Hz/5mA/1min*
  - $(N_2)/(CORE)$
  - 2kVac/50Hz/3mA/1min*

(*) 1min in qualification / 2sec in mass production