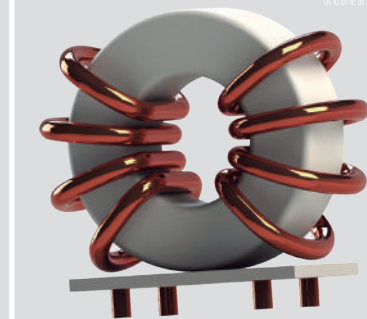


New

CMCN1R0-36V

Common Mode Choke 2x1mH / 36Adc

INDUCTIVE COMPONENTS / COMMON MODE CHOKES



APPLICATIONS

- › Automotive EV/PHV AC/DC onboard battery chargers
- › Automotive HV/LV DC/DC converters

01 FEATURES

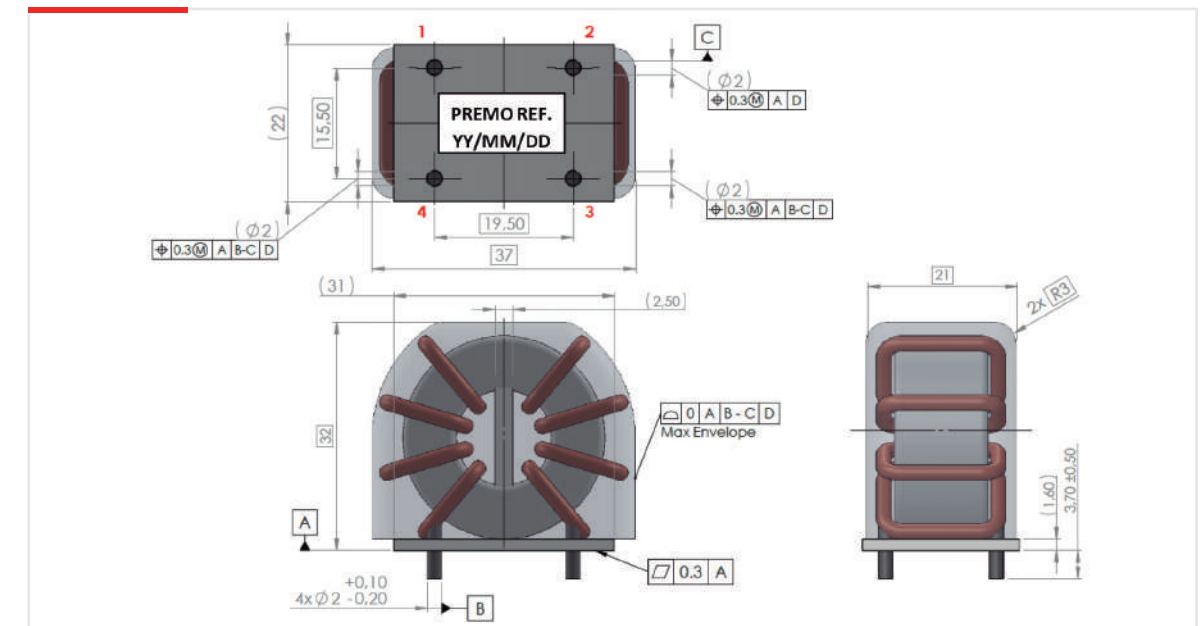
- › High performance CMC using nanocrystalline core
- › Optimized size for higher power density
- › Wide operating temperature range -40 to +140°C
- › UL94V and RoHS materials
- › AEC-Q200 qualified
- › Weight : approx 30grams

02 OPERATION

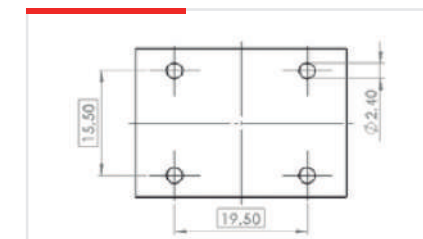
- › Up to 36A (RMS or DC) per winding
- › Total losses < 4W @100°C/2x36Adc
- › Estimated temperature rise on PCB < 45°C (cooling needed)

03 SPECIFICATIONS

DIMENSIONS



RECOMMENDED PAD-LAYOUT



ELECTRICAL DIAGRAM



ELECTRICAL SPECIFICATIONS

INDUCTANCE at 25°C

$$L_{1-4} = L_{2-3} \text{ (10kHz/0.3Vac)} \quad | \quad 1.0\text{mH TYP (0.56-1.5mH)}$$

TURN-RATIO

$$N_{1-4} : N_{2-3} \text{ (10kHz/1Vac)} \quad | \quad 1:1$$

DC RESISTANCE at 25°C

$$\text{DCR}_{1-4} = \text{DCR}_{2-3} \quad | \quad 1.1\text{m}\Omega \text{ TYP (1.4m}\Omega \text{ MAX)}$$

LEAKAGE INDUCTANCE

$$\text{Llk}_{1-4} = \text{Llk}_{2-3} \text{ (100kHz/1Vac)} \quad | \quad 0.7\mu\text{H TYP (0.4-1}\mu\text{H)}$$

DIELECTRIC STRENGTH

$$\text{Between Windings} \quad | \quad 1500\text{Vac (50Hz/3mA/1min)}$$