Nanocristalline Toroidal Cores Assembly

Nanocristalline toroidal cores assembly technology is partially molded with baseplate for power Common Mode Chokes and Output Filtering Inductors. This design is characterized by its extreme reliability due to its magnetic circuit, chosen to guarantee a stable inductance value across the temperature range –40°C to +150°C.

Key Benefits

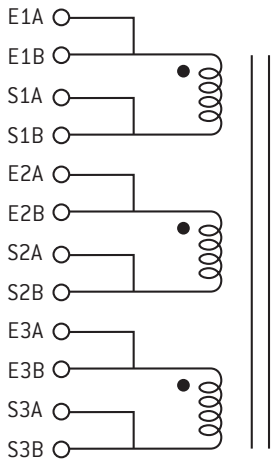
- **Volume and weight savings vs ferrites and silicon iron cores**
- **Stability of inductance across the temperature range –40°C to 150°C**
- **Very low losses**

Technical characteristics

Materials meet UL V0 rating	
Frequency	Up to 10 MHz
Insulation class	Up to 200°C
DC current	Up to 500 A
Molding	Epoxy, Polyurethane

Electric schematic example

Common Mode Chokes (CMC)



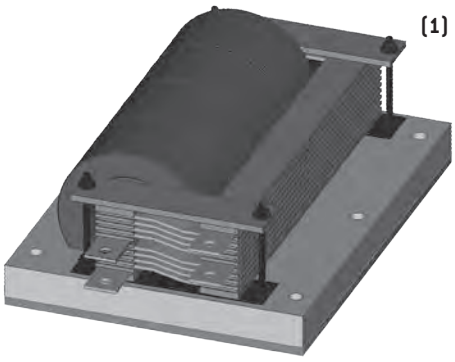
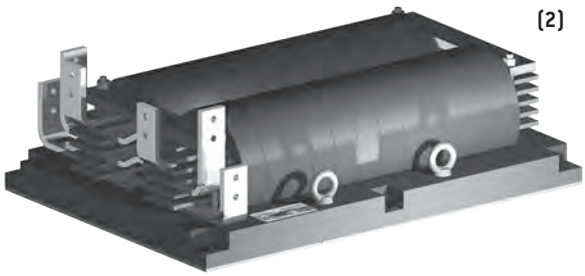
Examples of Inductors

Functionality	Inductance (mH)	Current (A)	Common mode Current	Weight (kg)	L x W x H* (mm)
CMC	2 x 0.55	110	–	3	205 x 140 x 80 **(1)**
CMC	3 x 11 to 22	290/1.8 mΩ to 145/3 mΩ	–	25 to 32	350 x 350 x 140
CMC	3 x 5,5	508/0.15 mΩ	2.7 ApK (9 kHz)	52	520 x 360 x 210 **(2)**

***** L = Lengths –W = Width –H = Height

Other design examples

(1)



(2)