



Amorphous Cut Cores

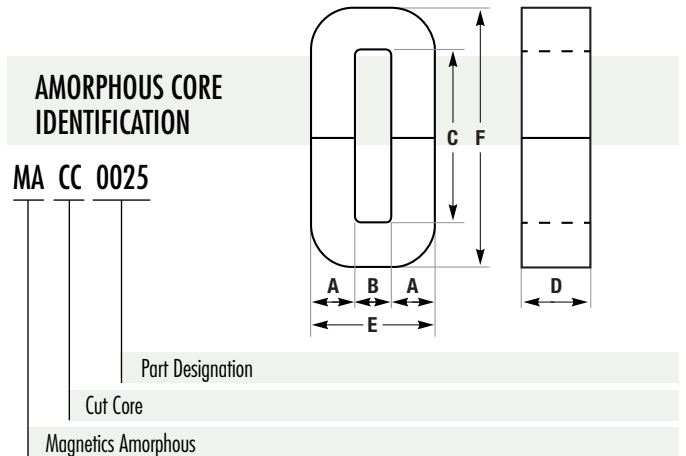


Amorphous cut cores are made from metallic glass materials without a crystalline structure (as seen in silicon steels, permalloys, orthonol, and nanocrystalline cores). The amorphous atomic structure results in much higher resistivity than what is exhibited by crystalline alloys; therefore, amorphous cut cores offer excellent frequency response and efficiency.

Amorphous cut cores are a choice solution for high frequency, low loss applications such as uninterruptible power supplies (UPS), SMPS power factor correction (PFC) chokes, filter inductors, and high frequency power transformers and inductors. When compared to ferrite cores, amorphous cores provide a wider operational temperature range, much higher flux capacity, and significantly higher impedance at high frequencies.

Amorphous cut cores are strong in both compression and tension. They resist fracture and corrosion.

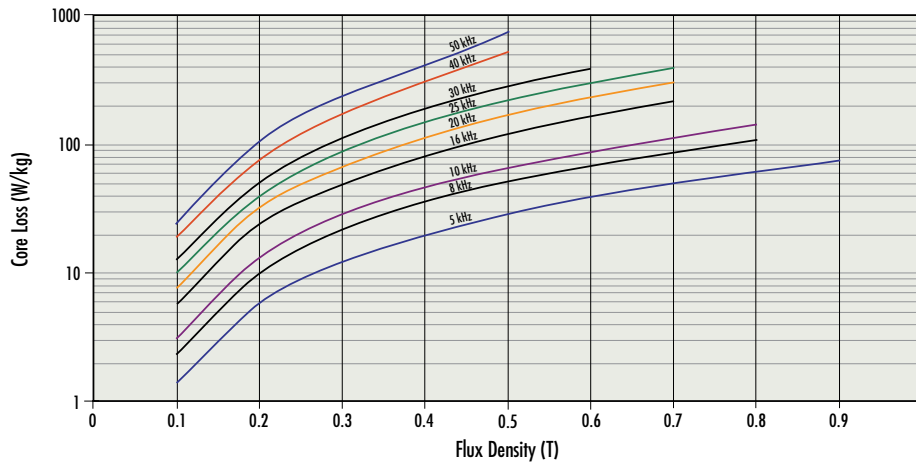
Currently available in cut (C shape) cores. Toroids and split cores available upon request.



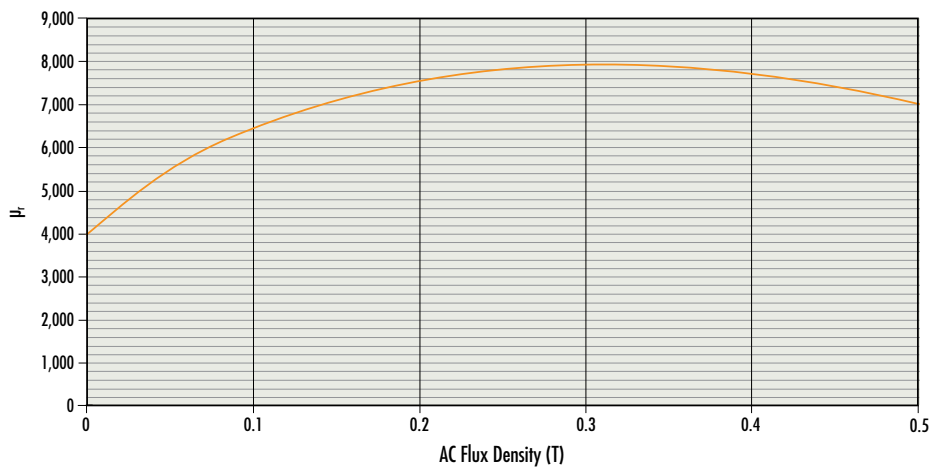
Part No.	Dimensions (mm)						Path Length (cm)	Cross Section (cm ²)
	A	B	C	D	E	F	L _e	A _e
MACC0004	9.0	9.0	32.0	15.0	28.0	51.0	10.7	1.24
MACC0006P3	10.0	10.0	33.0	20.0	31.0	53.0	12.8	1.6
MACC0008	11.0	12.5	29.5	20.0	35.0	53.0	11.7	2.0
MACC0010	11.0	13.0	40.0	20.0	35.5	63.0	15.4	1.8
MACC0020Y	11.0	12.0	50.0	30.0	35.5	73.0	16.2	2.8
MACC0025	13.0	15.0	56.0	25.0	42.0	84.0	17.9	3.6
MACC0032	13.0	15.0	56.0	30.0	41.0	82.0	17.5	3.5
MACC0063	16.0	20.0	70.0	30.0	53.5	105.0	23.2	4.4
MACC0125	19.0	24.0	83.0	35.0	63.5	122.0	26.7	6.1
MACC0160	19.0	24.0	83.0	40.0	63.0	122.0	27.3	6.6
MACC0320	22.0	34.0	84.0	50.0	79.0	131.0	30.5	9.5
MACC1000	33.0	40.0	105.0	85.0	106.0	171.0	42.2	23.0

Additional sizes may be available upon request.

Core Loss vs. Flux Density



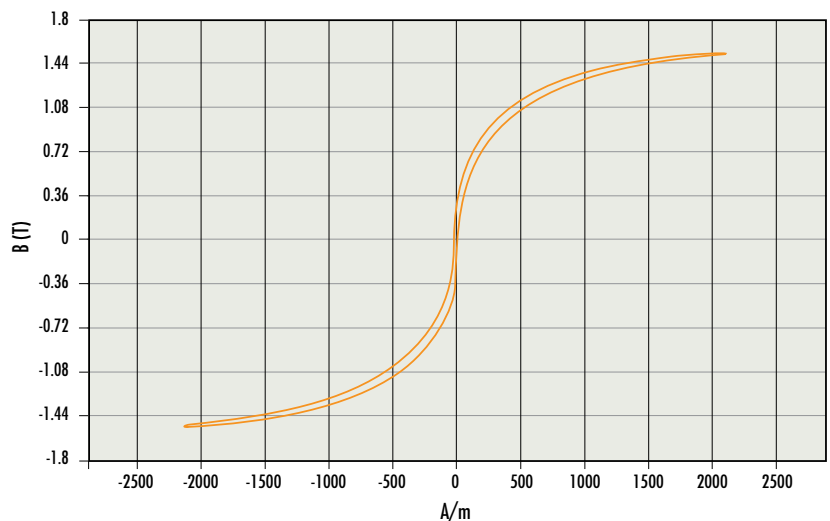
Typical Permeability vs. Flux Density @ 10 kHz



Properties

Saturation Flux Density	1.56 T
Coercive Force	<6 A/m
Density	7.2 g/cm ³
Curie Temperature	410°C
Crystallization Temperature	550°C
Resistivity	130 μΩ·cm
CTE	27 x10 ⁻⁶ /°C
Hardness HV	960 kg/mm ²

BH Loop



www.mag-inc.com

HEADQUARTERS

110 Delta Drive
Pittsburgh, PA 15238

(p) 1.412.696.1333
1.800.245.3984

magnetics@spang.com

MAGNETICS INTERNATIONAL

13/F 1-3 Chatham Road South
Tsim Sha Tsui, Kowloon, Hong Kong

(p) +852.2731.9700
+86.139.1147.1417

asiasales@spang.com