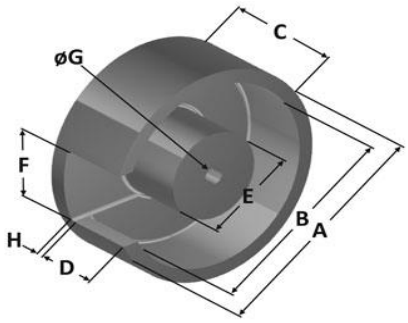
MICROMETALS™
POWDER CORE SOLUTIONS

Part Number:	PFS-060040-014-2
Revision:	2026-May-07



A	60.50 ± 0.50 mm	2.382 ± 0.020 in
B	51.50 ± 0.50 mm	2.028 ± 0.020 in
C	20.00 ± 0.25 mm	0.787 ± 0.010 in
D	12.75 ± 0.25 mm	0.502 ± 0.010 in
E	25.30 ± 0.30 mm	0.996 ± 0.012 in
F	14.80 ± 0.30 mm	0.583 ± 0.012 in
G	4.50 ± 0.10 mm	0.177 ± 0.004 in
Mass	(approximate)	160 grams/half

Magnetic Dimensions	A_e - Eff. Mag. Cross Section	5.89 cm²
	L_e - Eff. Mag. Path Length	9.30 cm
	V_e - Eff. Core Volume	54.8 cm³
	WA - Min. Eff. Window Area	3.18 cm²
	sa - Surface Area	134 cm²
	mlt - mean length per turn	12.1 cm
Inductance	μ_i(reference)	14
	A_L value (nominal)	111 nH/N²
	Test Winding	N=TBD, #TBD AWG
	Frequency	10k Hz
	Voltage on Agilent 4284A	TBD
	A_L tolerance	Ref Only

Core Loss

$$\text{Core Loss(mW/cm}^3\text{)} = \frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$$

where B_{pk} expressed in gauss, f expressed in hertz, and:

a=1.0000E+06, b=2.0309E+08, c=3.1449E+06, d=2.0409E-15

B_{pk}	300	G
frequency	100k	Hz
Core Loss (nominal)	152	mW/cm³
Core Loss (maximum)	175	mW/cm³

DC Saturation

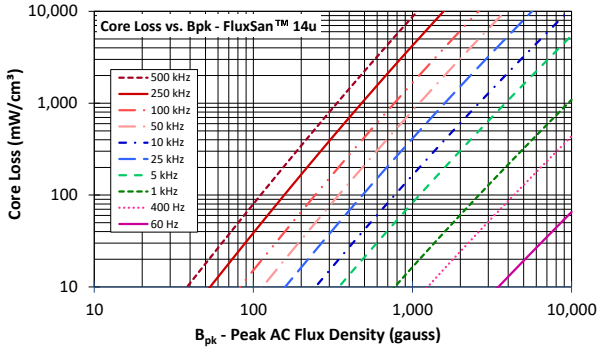
$$\%\mu_i = \frac{1}{a + b \cdot H^c} + d$$

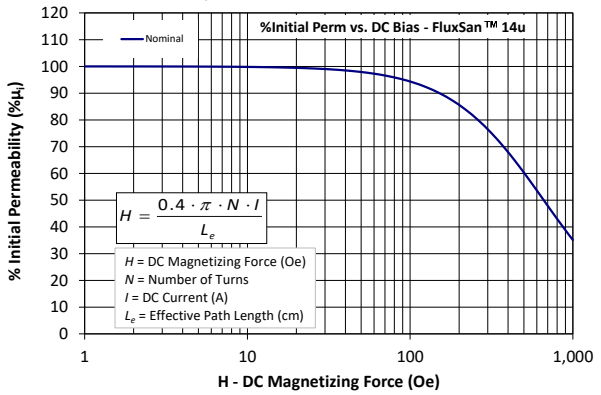
where H expressed in oersteds, and:

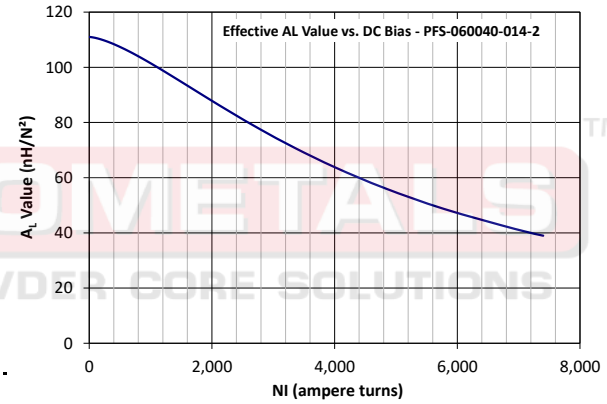
a=1.0000E-02, b=6.2943E-07, c=1.4892, d=0.0000

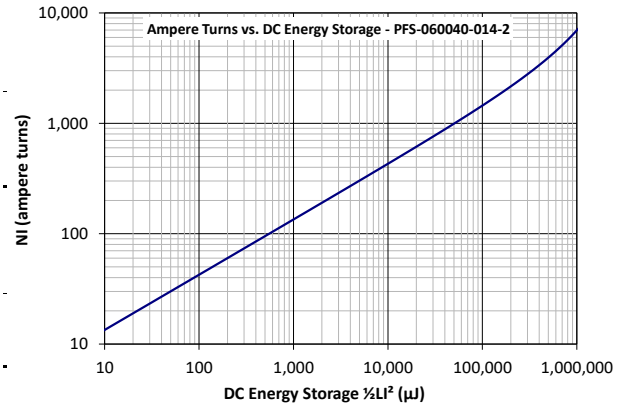
H_{DC}	200	Oe
Percent Initial Perm(nom.)	85.6	%
Percent Initial Perm(min.)	81.9	%

Coating/Pkg	Coating Type:	Blue Epoxy
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	TBD Halves/Box









Winding Table

Wire Size	AWG	8	10	12	14	16	18	20	22	24	26	28
	mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
Full Winding	Turns	17	26	41	63	98	152	235	364	564	873	1,350
	Rdc(Ω)	4.2 m	10.3 m	25.7 m	62.9 m	155.5 m	383.6 m	943.2 m	2.3	5.7	14.1	34.7

Special Spec: Preliminary

Handling and Storage: Cores should be stored in the original unopened packaging between -10°C and +50°C and less than 60% relative humidity. After the original packaging is opened, the cores should be stored between -8°C and +25°C less than 30% relative humidity. Gloves should be used when handling uncoated cores. The cores should also be sheltered from rain, moisture, salt water, salt air, plasters, ashes, sulfur, sulfur dioxide, ammonia sulfates, soils, acids, metals shavings, and solvents.

Operating Temperature: Cores can be used continuously at operating temperatures between -60°C and +200°C.

RoHS 2.0, REACH and ISO (TS16949, ISO 9001, ISO 14001) compliant. Statements available for download at www.micrometalsapc.com.