

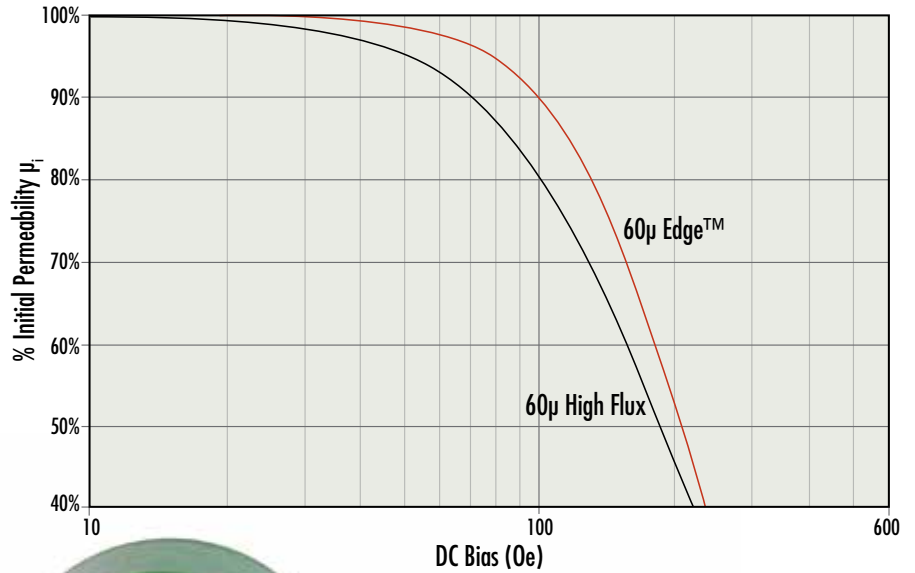


Edge™ Powder Cores

Designed for cutting edge performance, Edge™ cores offer the highest efficiency and best DC bias performance of all alloy powder cores. When compared with High Flux, Edge displays approximately 40% lower losses and 30% improvement in DC bias. Edge is the choice material for telecom servers or high density rack mount power supplies.

Currently available in 26 and 60 permeabilities.

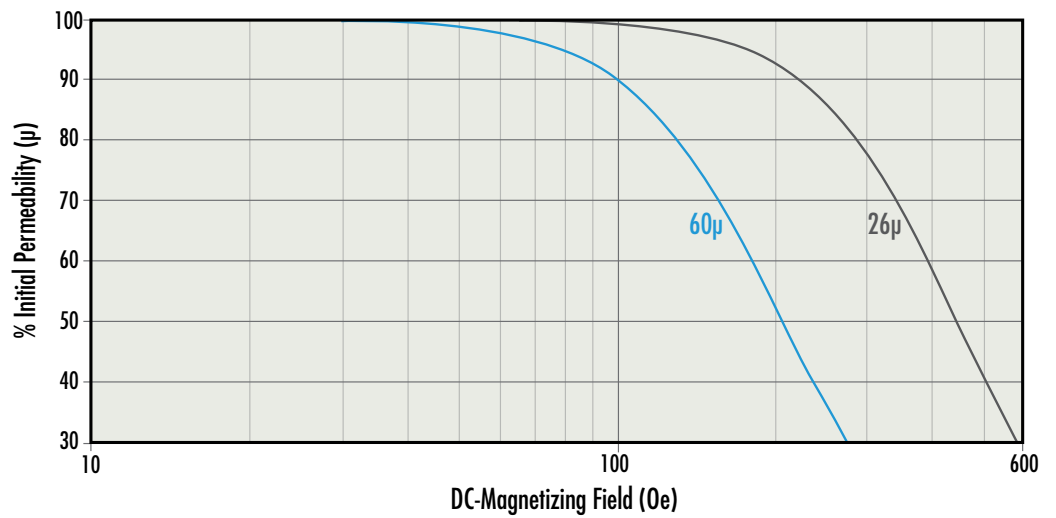
Permeability vs. DC Bias



Material	Alloy Composition	DC Bias	Core Loss	Relative Cost	Saturation Flux Density (Tesla)	Curie Temperature	60 μ Maximum Usable Frequency
Edge	FeNi	Highest	Very Low	High	1.5	500°C	20 MHz
High Flux	FeNi	High	Moderate	High	1.5	500°C	3 MHz
XFlux®	FeSi	High	High	Low	1.6	700°C	1.5 MHz
Kool M μ ® MAX	FeSiAl	Moderate	Low	Medium	1.0	500°C	15 MHz
Kool M μ ® Hf	FeSiAl	Moderate	Lowest	Medium	1.0	500°C	30 MHz
MPP	FeNiMo	Moderate	Very Low	Highest	0.8	460°C	6 MHz
Kool M μ ®	FeSiAl	Moderate	Low	Lowest	1.0	500°C	5 MHz

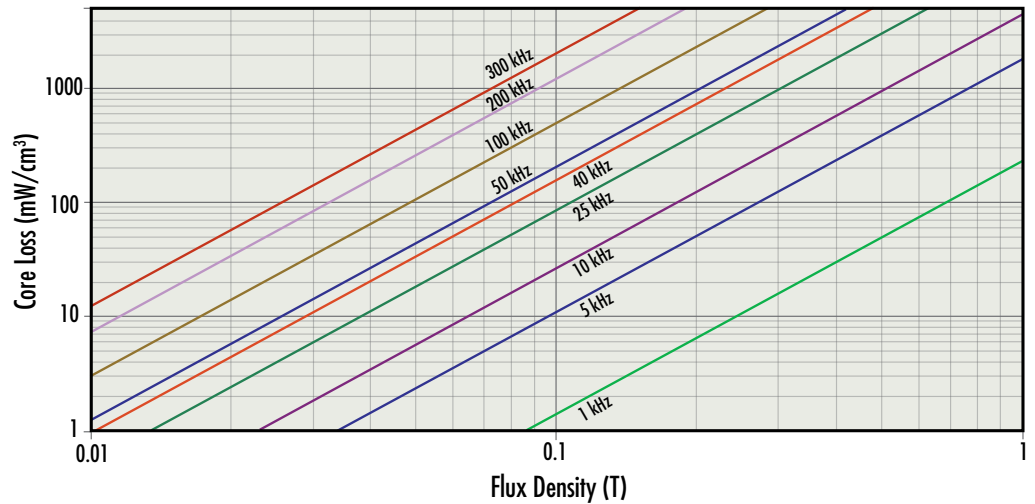
Permeability vs. DC Bias

$\% \text{ Initial Permeability} = \frac{1}{(a + bH^c)}$			
	a	b	c
26 μ	0.01	3.65E-11	3.192
60 μ	0.01	9.20E-10	3.044



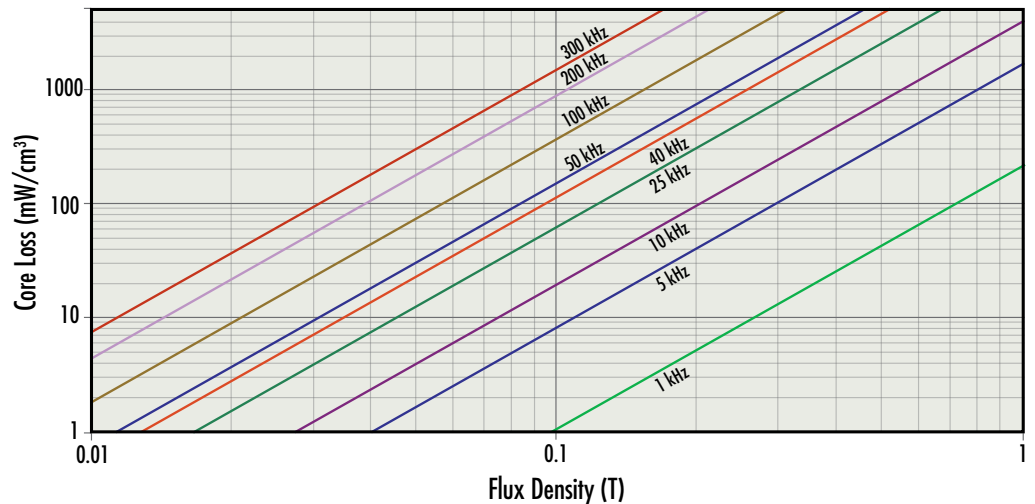
26 μ Core Loss Density

$P = a(B^b)(f^c)$ (B in Tesla, f in kHz)			
	a	b	c
26 μ	227.54	2.209	1.27



60 μ Core Loss Density

$P = a(B^b)(f^c)$ (B in Tesla, f in kHz)			
	a	b	c
60 μ	211.51	2.309	1.28



DC Magnetization $B = \left[\frac{a + bH + cH^2}{1 + dH + eH^2} \right]^x$ Units: B in Tesla, H in Oe

Perm	a	b	c	d	e	x
26 μ	9.881E-02	4.291E-01	6.528E-03	8.473E-01	5.639E-03	4.997
60 μ	1.955E-01	3.078E-02	1.020E-03	8.346E-02	7.333E-04	2.462



HEADQUARTERS

110 Delta Drive
Pittsburgh, PA 15238

(p) 1.412.696.1333
1.800.245.3984

magnetics@spang.com
www.mag-inc.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
www.mag-inc.com