

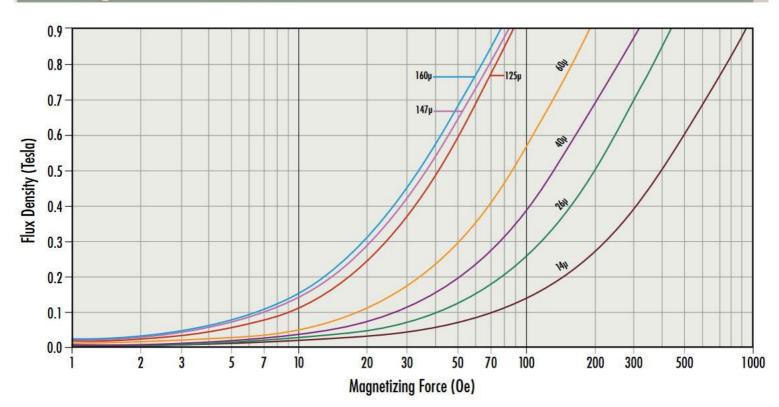
# High Flux Material Property Curves

- DC Magnetization Curves
- Core Loss Density Curves
- Permeability versus Temperature Curves
- Permeability versus DC Bias Curves
- Permeability versus Frequency Curves
- Permeability versus AC Flux Curves
- Core Selection Chart

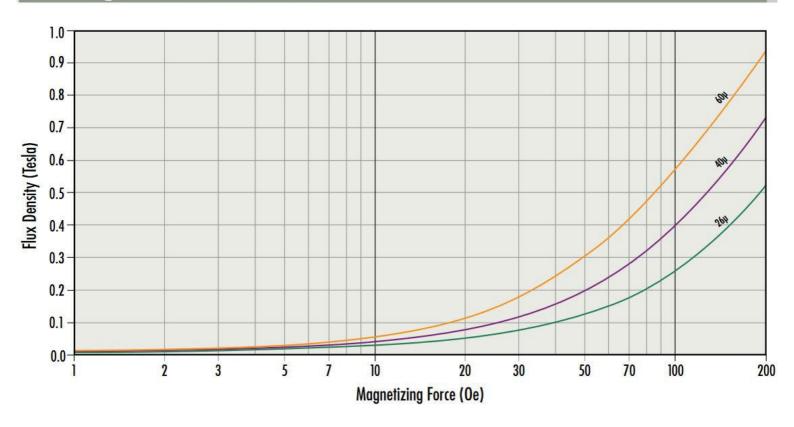
## DC Magnetization Curves



### High Flux Toroids



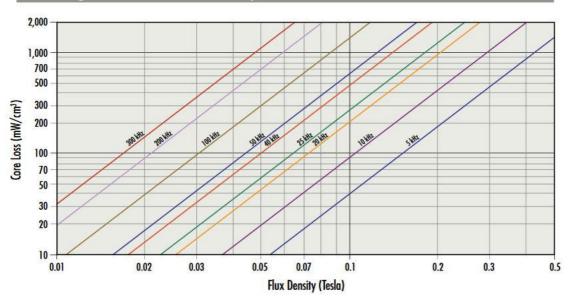
### High Flux EQ Cores



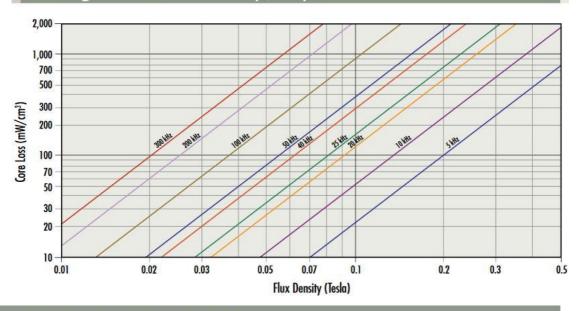
## Core Loss Density Curves



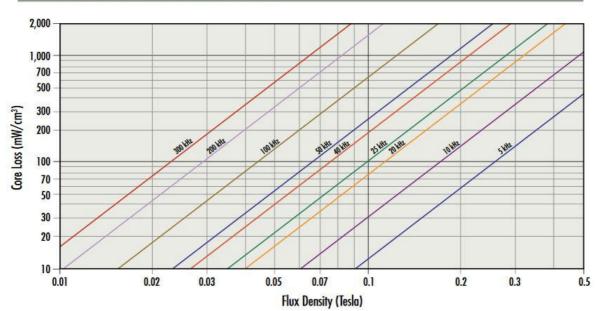




### High Flux Toroids 26μ, 40μ



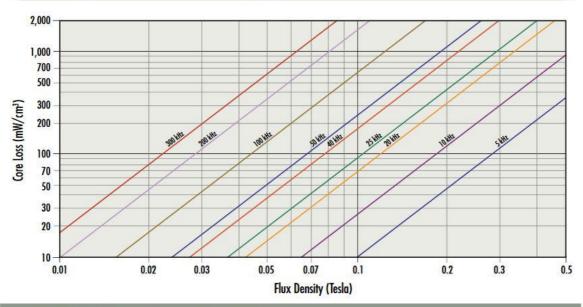
### High Flux Toroids 60µ



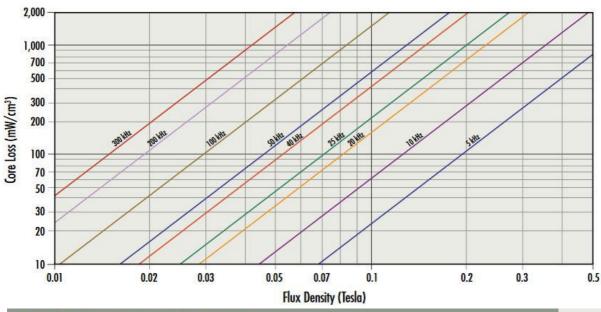
## Core Loss Density Curves



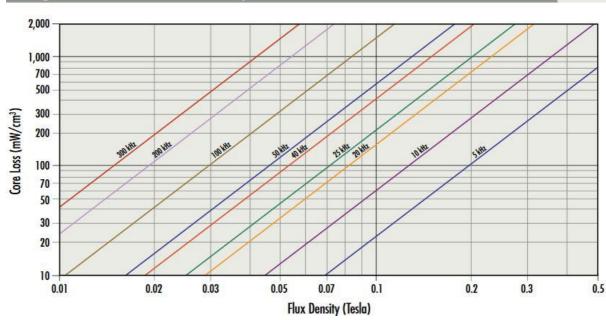




### High Flux Toroids 147µ



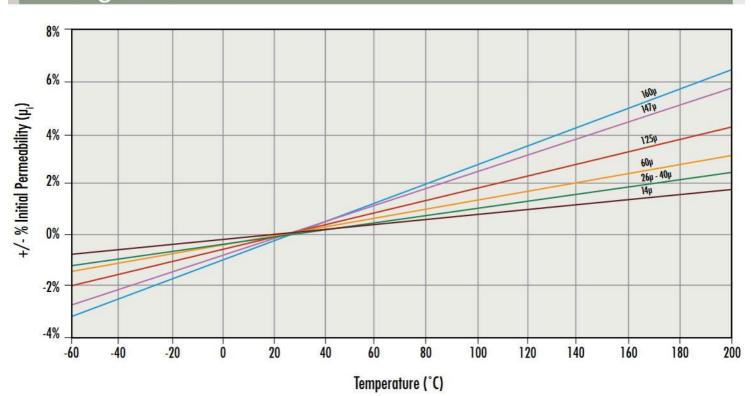
#### High Flux Toroids 160µ





## Permeability versus Temperature Curves

### High Flux



### Fit Formula

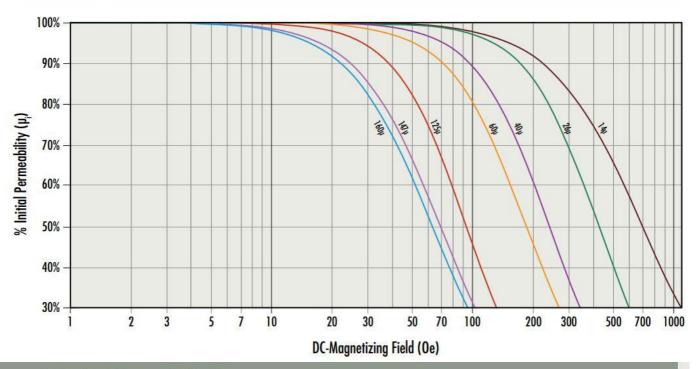
Change compared with 
$$\mu_{25\text{CC}} = \frac{\mu_T - \mu_{25\text{CC}}}{\mu_{25\text{CC}}} = a + bT + cT^2$$

	Perm	a	Ь	c
	14µ	-2.500E-03	9.670E-05	5.560E-08
	26µ	-3.300E-03	1.290E-04	3.800E-08
Heat Plan	60µ	-4.400E-03	1.740E-04	4.090E-08
High Flux	125µ	-6.000E-03	2.400E-04	3.220E-08
	147μ	-7.900E-03	3.140E-04	7.310E-08
	160µ	-9.200E-03	3.670E-04	1.750E-08

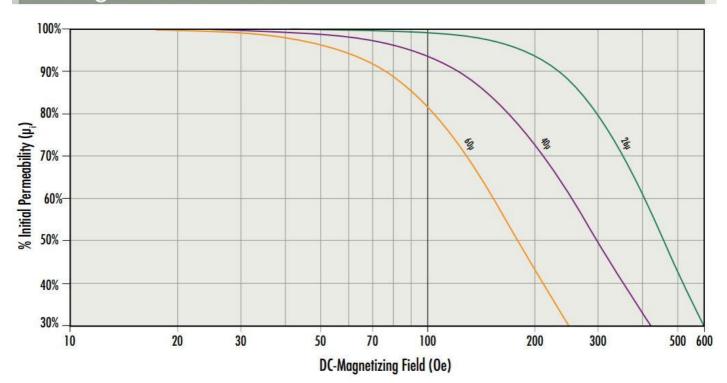
## MAGNETICS

## Permeability versus DC Bias Curves

### High Flux Toroids



### High Flux EQ Cores



% initia	al permeability =	1 (a + bH	where H	is Oersteds
	Perm	a	ь	c c

0.01

1.583E-08

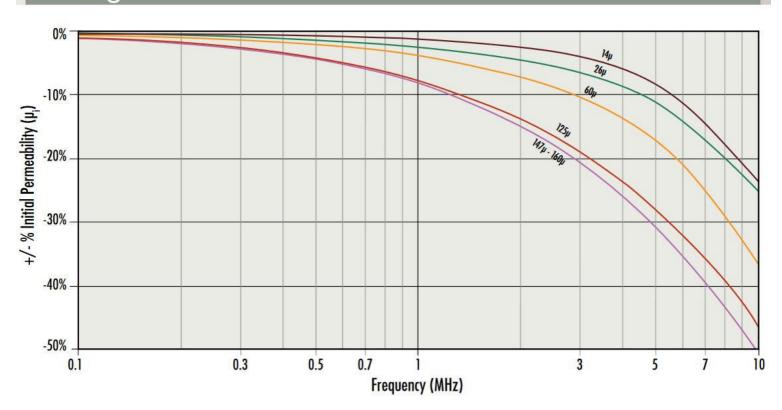
2.572

	Perm	a	Ь	C
	14p	0.01	3.389E-08	1.923
	26µ	0.01	4.205E-09	2.426
Heat Plan	40µ	0.01	1.841E-08	2.409
High Flux	60µ	0.01	6.413E-08	2.291
Toroids	125µ	0.01	1.403E-07	2.465
	147µ	0.01	1.207E-06	2.131
	160µ	0.01	1.704E-06	2.094



### Permeability versus Frequency Curves

### High Flux



### Fit Formula

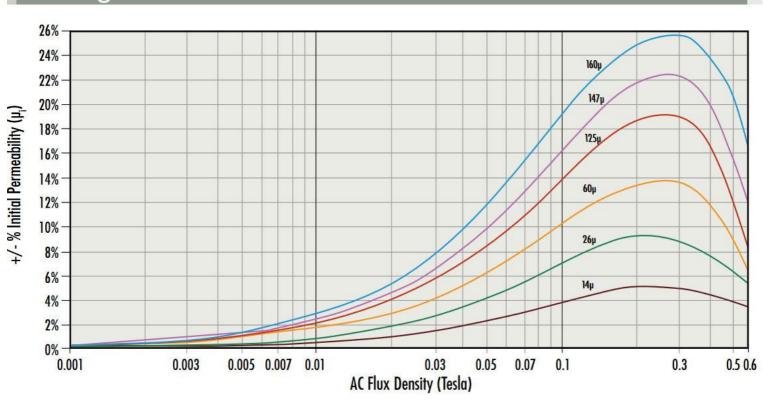
 $\pm \%\mu_i = a + bf + cf^2 + df^3 + ef^4$  where f = megahertz (MHz)

	Perm	a	Ь	c	d	e
14μ 26μ 60μ High Flux 125μ 147μ 160μ	14µ	0	-1.070E-02	5.960E-04	-4.920E-04	3.070E-05
	26µ	0	-2.560E-02	3.430E-03	-7.340E-04	3.990E-05
	60µ	0	-3.870E-02	3.050E-03	-5.490E-04	2.690E-05
	125µ	0	-8.600E-02	1.140E-02	-1.370E-03	6.050E-05
	147μ	0	-8.170E-02	7.330E-03	-6.400E-04	2.390E-05
	160µ	0	-8.590E-02	7.220E-03	-5.530E-04	1.880E-05



## Permeability versus AC Flux Curves

### High Flux



### Fit Formula

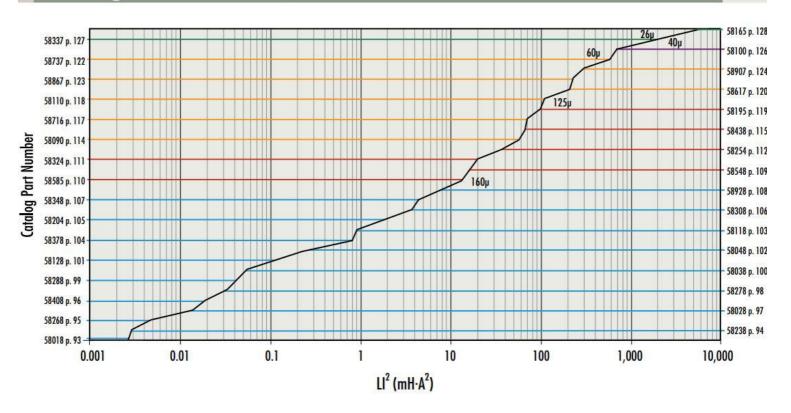
 $\pm \%\mu_i = (a + bB + cB^2 + dB^3 + eB^4)$  where B is Tesla

	Perm	a	Ь	c	d	е
High Flux	14µ	-1.000E-03	5.458E-01	-1.930E+00	2.598E+00	-1.228E+00
	26µ	-2.000E-03	1.020E+00	-3.696E+00	5.099E+00	-2.529E+00
	60µ	0	1.476E+00	-5.695E+00	9.395E+00	-6.182E+00
	125µ	0	1.934E+00	-6.792E+00	1.014E+01	-6.347E+00
	147μ	0	2.350E+00	-8.895E+00	1.465E+01	-9.716E+00
	160µ	-2.000E-03	2.910E+00	-1.224E+01	2.263E+01	-1.590E+01

### Core selection charts



### High Flux Toroids



### High Flux EQ Cores

