



Kool M μ [®] Hf

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

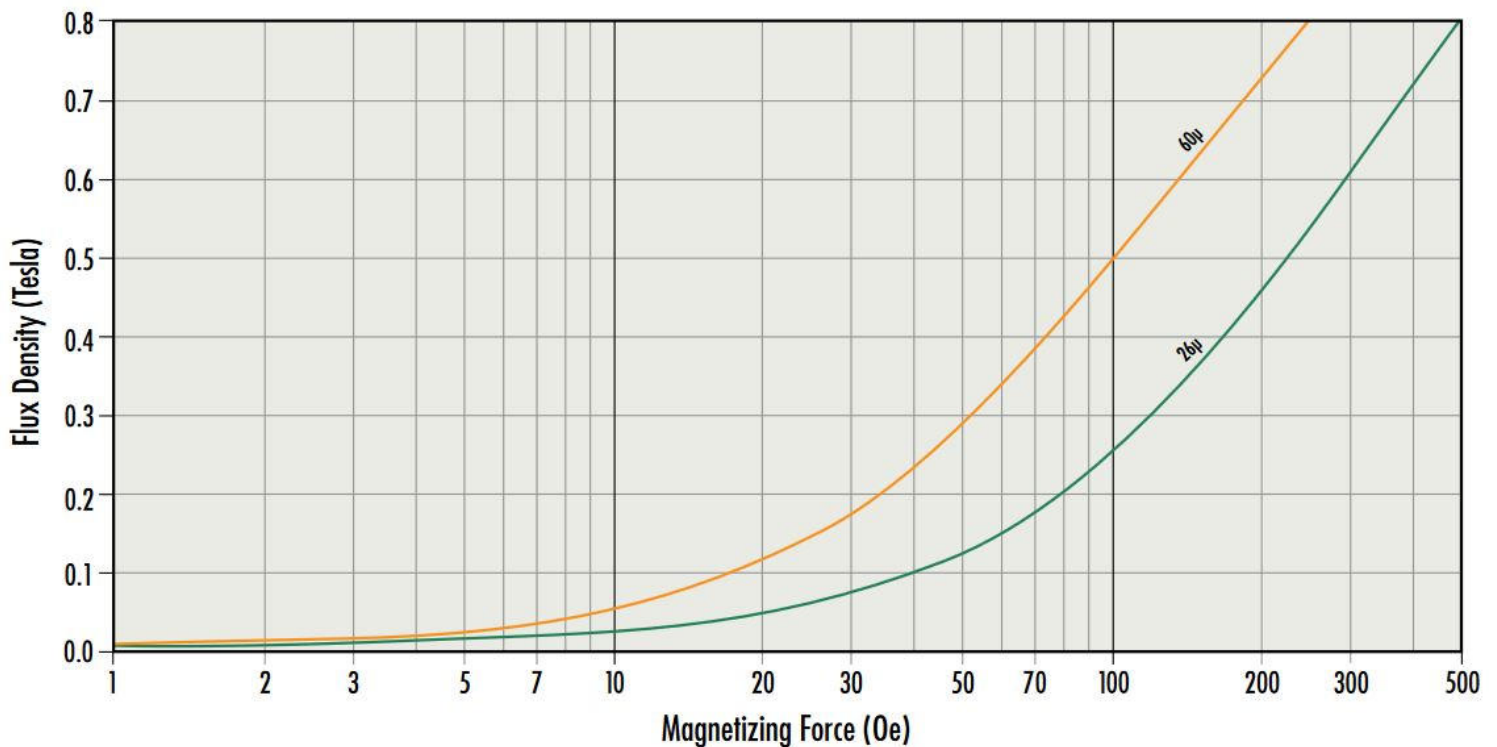


Fit Formula

$$B = \left[\frac{a + bH + cH^2}{1 + dH + eH^2} \right]^x \text{ where } B = \text{Tesla (T)}, H = \text{Oersteds (Oe)}$$

	Perm	a	b	c	d	e	x
Kool M μ [®] Hf Toroids	26 μ	5.241E-02	1.534E-02	5.564E-04	9.843E-02	4.635E-04	1.770
	60 μ	3.621E-02	1.674E-02	5.950E-04	5.718E-02	5.134E-04	1.599

Kool M μ [®] Hf Toroids



Core Loss Density Curves

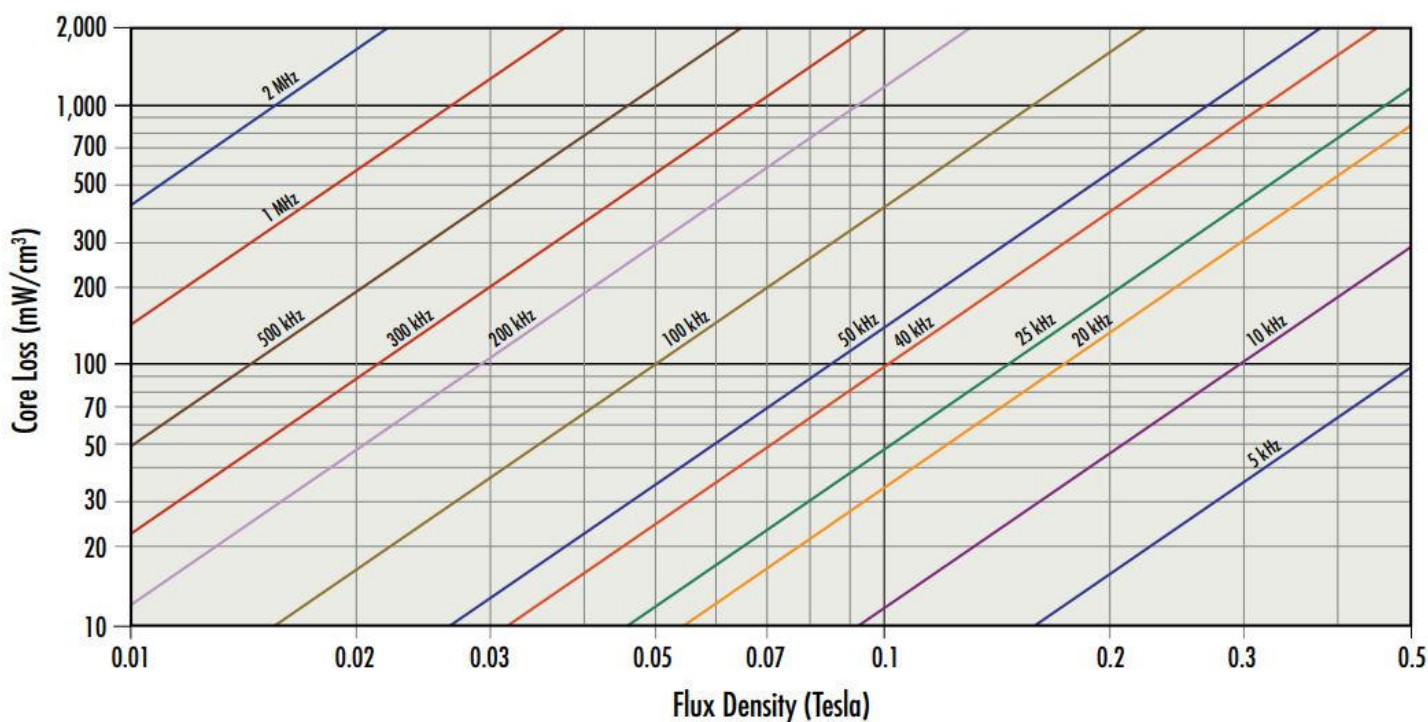


Fit Formula

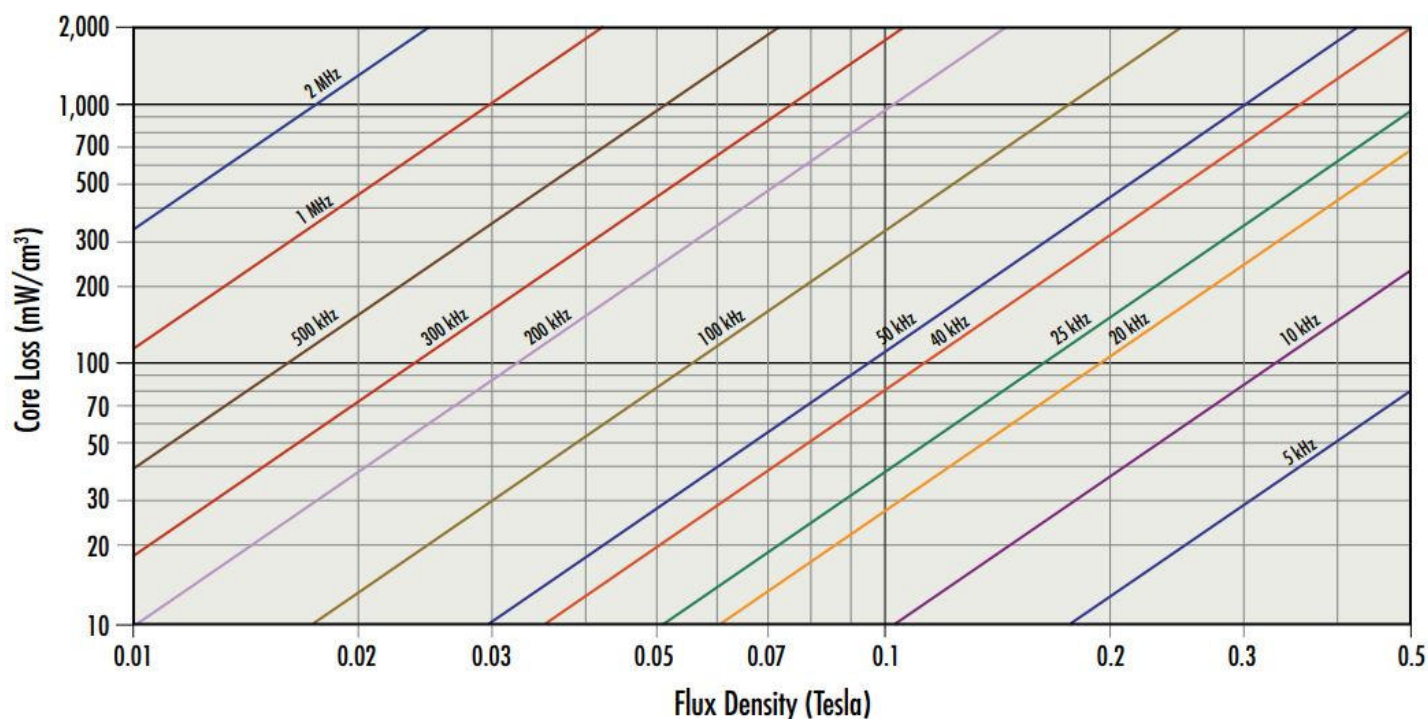
$$P = aB^b f^c \text{ where } B = \text{Tesla (T)}, f = \text{kilohertz (kHz)}$$

	Perm	a	b	c
Kool M μ [®] Hf Toroids	26 μ	32.22	1.988	1.541
	60 μ	26.18	1.988	1.541

Kool M μ [®] Hf Toroids 26 μ

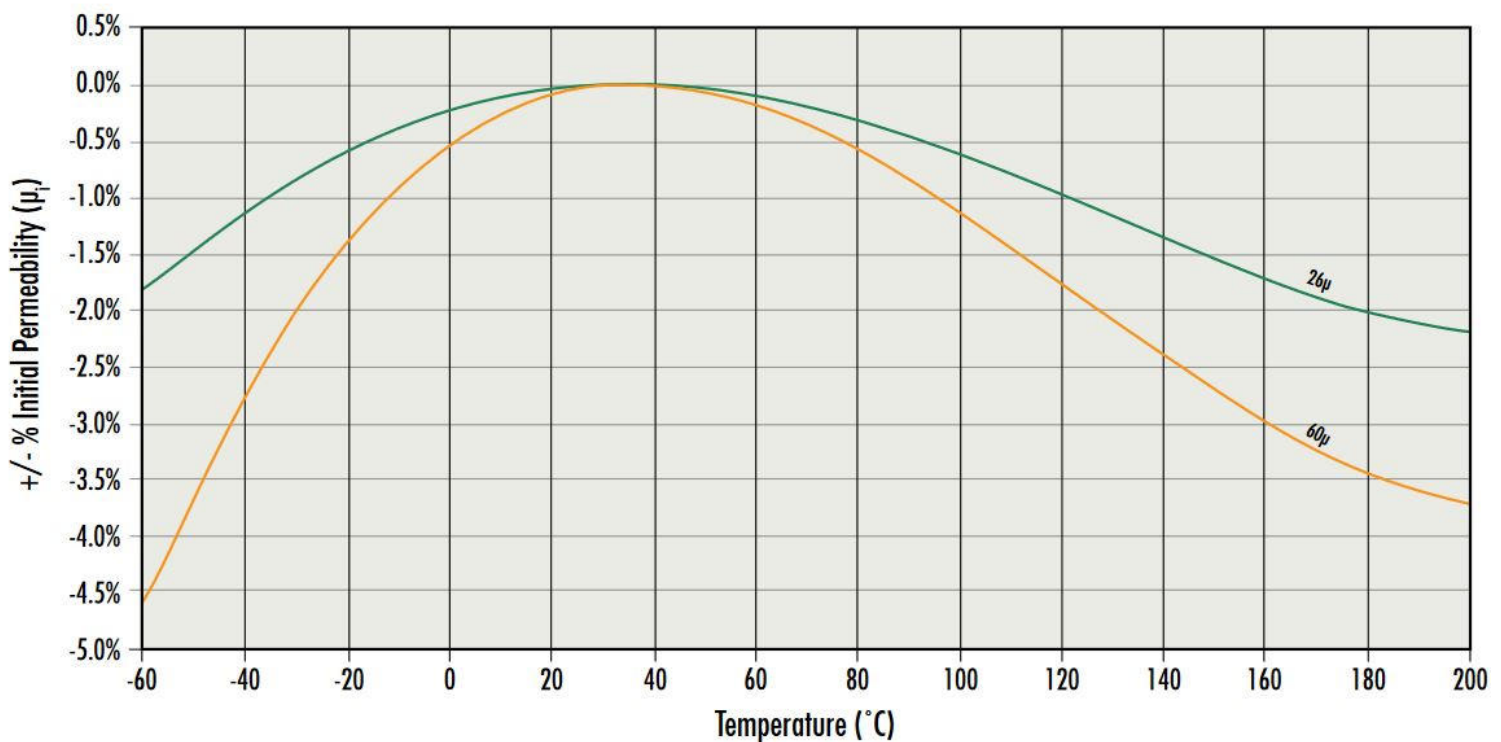


Kool M μ [®] Hf Toroids 60 μ



Permeability versus Temperature Curves

Kool M μ [®] Hf



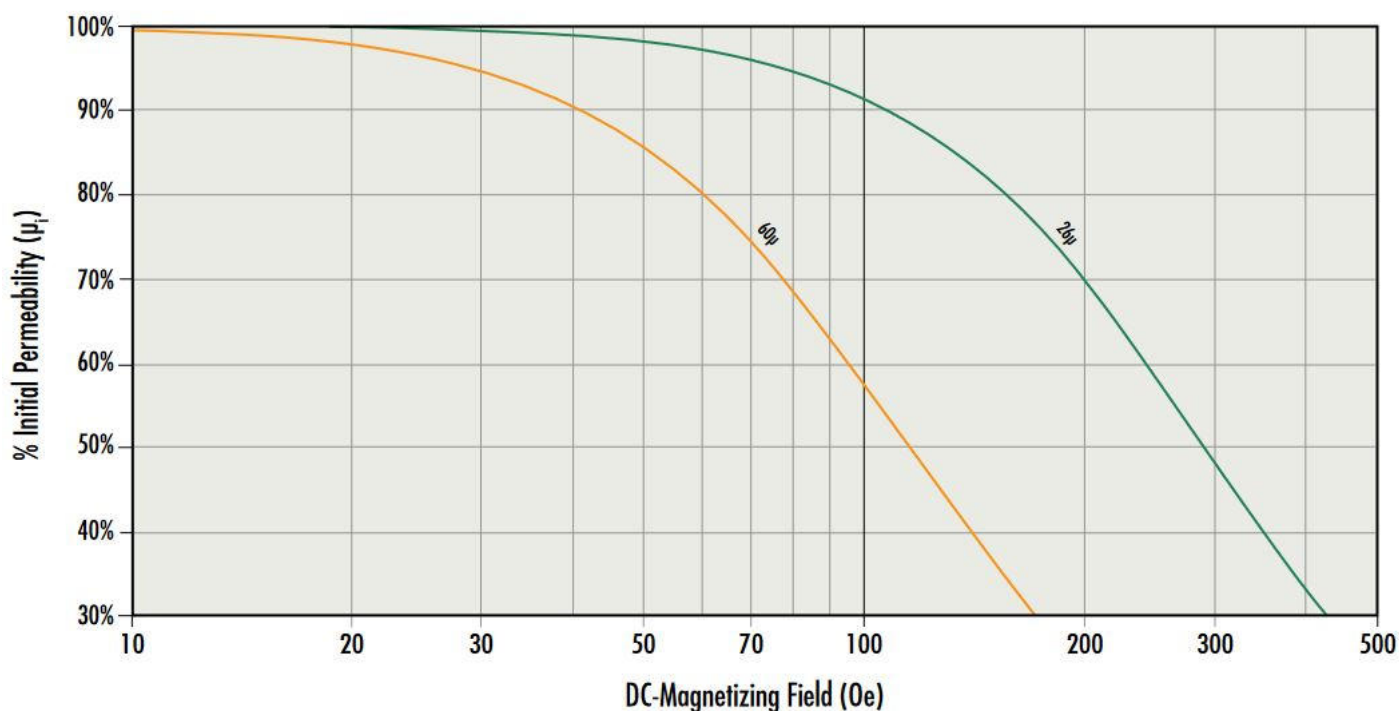
Fit Formula

$$\text{Change compared with } \mu_{25^\circ\text{C}} = \frac{\mu_T - \mu_{25^\circ\text{C}}}{\mu_{25^\circ\text{C}}} = a + bT + cT^2 + dT^3 + eT^4$$

	Perm	a	b	c	d	e
Kool M μ [®] Hf	26 μ	-2.268E-03	1.373E-04	-2.055E-06	1.755E-09	1.316E-11
	60 μ	-5.441E-03	3.217E-04	-5.135E-06	1.320E-08	2.276E-12

Permeability versus DC Bias Curves

Kool M μ [®] Hf Toroids



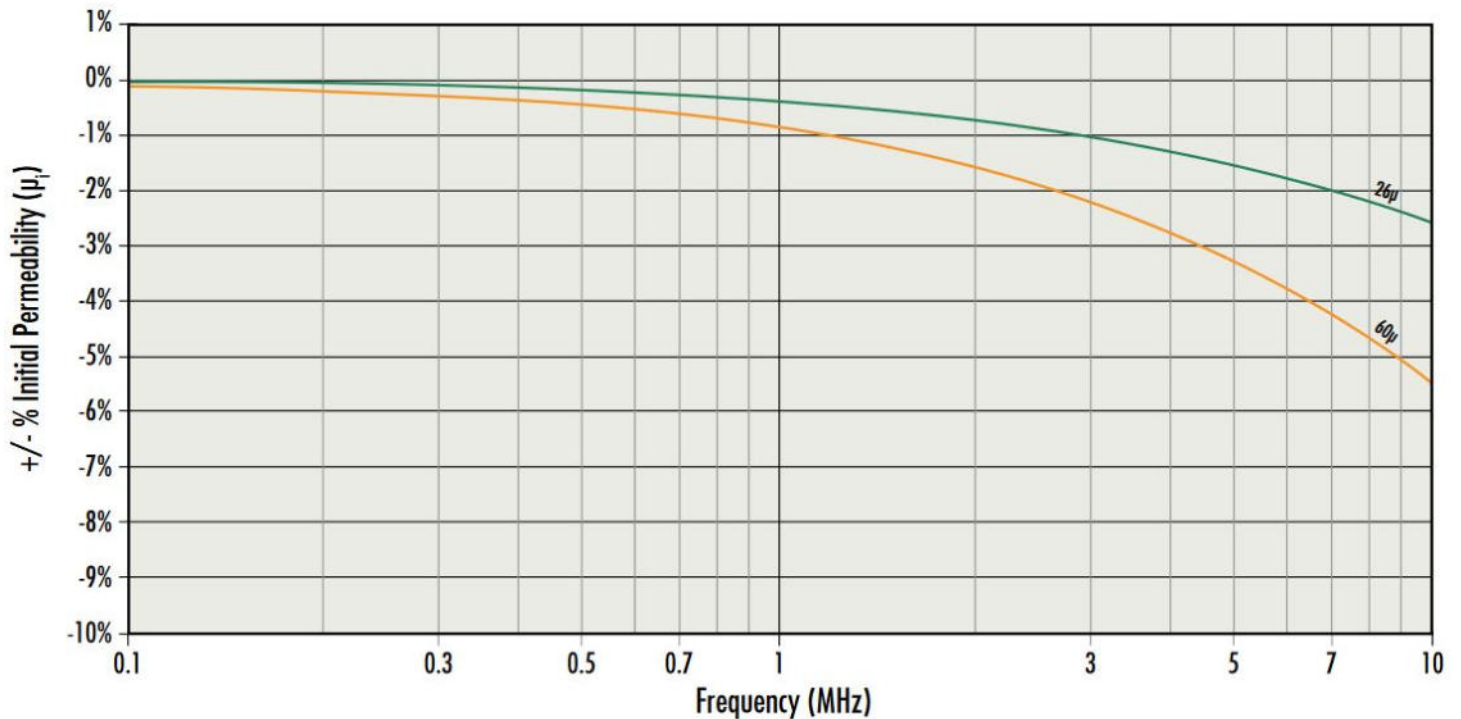
Fit Formula

$$\% \text{ initial permeability} = \frac{1}{(a + bH^c)} \quad \text{where } H \text{ is Oersteds (Oe)}$$

	Perm	a	b	c
Kool M μ [®] Hf Toroids	26 μ	0.01	3.556E-08	2.213
	60 μ	0.01	4.064E-07	2.131

Permeability versus Frequency Curves

Kool M μ [®] Hf



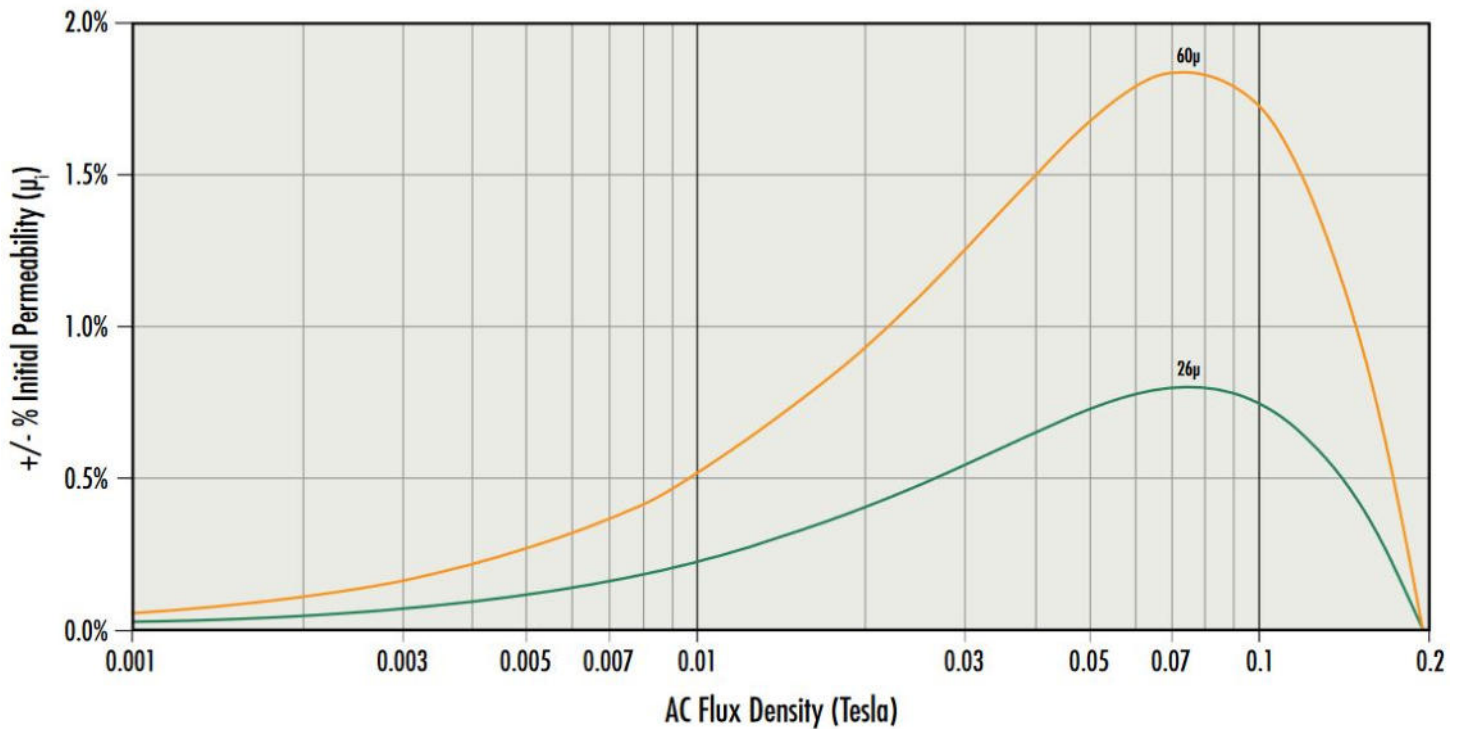
Fit Formula

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

	Perm	a	b	c	d	e
Kool M μ [®] Hf	26 μ	0	-4.371E-03	3.095E-04	-1.344E-05	0
	60 μ	0	-9.179E-03	6.500E-04	-2.822E-05	0

Permeability versus AC Flux Curves

Kool M μ [®] Hf



Fit Formula

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

	Perm	a	b	c	d	e
Kool M μ [®] Hf	26 μ	0	2.464E-01	-2.368E+00	7.404E+00	-8.877E+00
	60 μ	0	5.686E-01	-5.465E+00	1.709E+01	-2.049E+01

Core selection charts



Kool M μ [®] Hf Toroids

