

Ferrites

RM 5

Core

B65805

Preliminary data

- Without center hole
- Ungapped

Magnetic characteristics (per set)

$$\Sigma l/A = 0,93 \text{ mm}^{-1}$$

$$l_e = 22.1 \text{ mm}$$

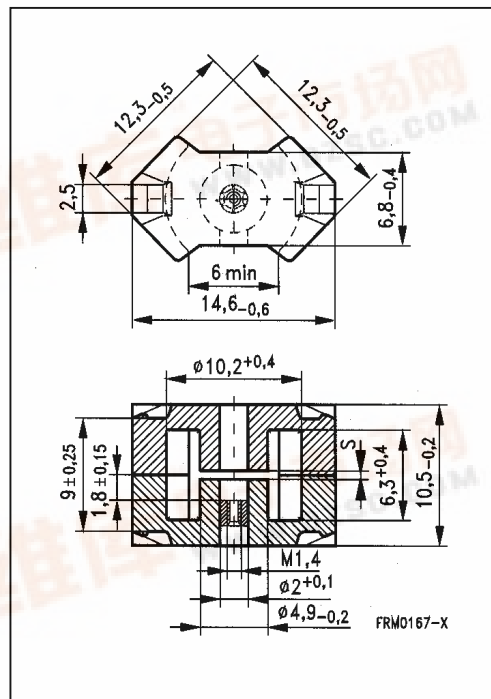
$$A_e = 23.8 \text{ mm}^2$$

$$A_{\min} = 18.0 \text{ mm}^2$$

$$V_e = 526 \text{ mm}^3$$

Approx. weight: 3.0 g/set

Mode of delivery: Sets

 Packing: Standard styrofoam tray
(size 200 mm x 300 mm)


Material	A_L value ¹⁾ [nH]	μ_e	Air gap [mm]	Ordering code
N45	2600 +30/-20%	1920	—	B65805J0000R045

¹⁾ Measurement parameter: $f = 10 \text{ kHz}$ / $B = 0.25 \text{ mT}$ / 100 turns / room temperature

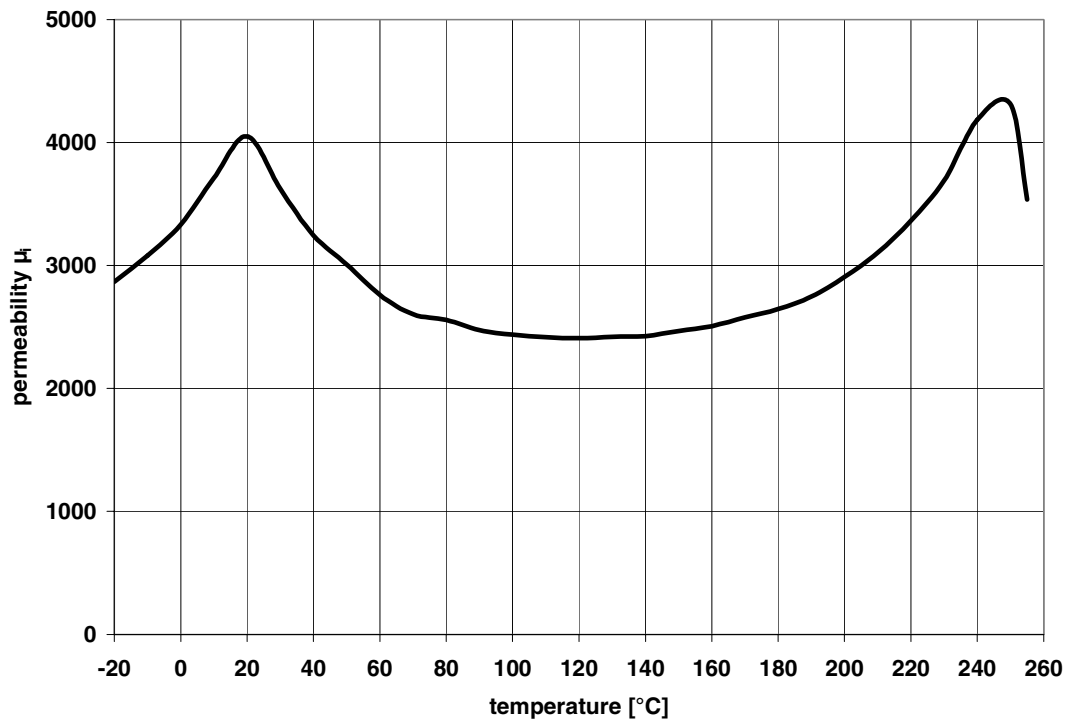
Material properties N 45

Preferred application: Broadband transformers

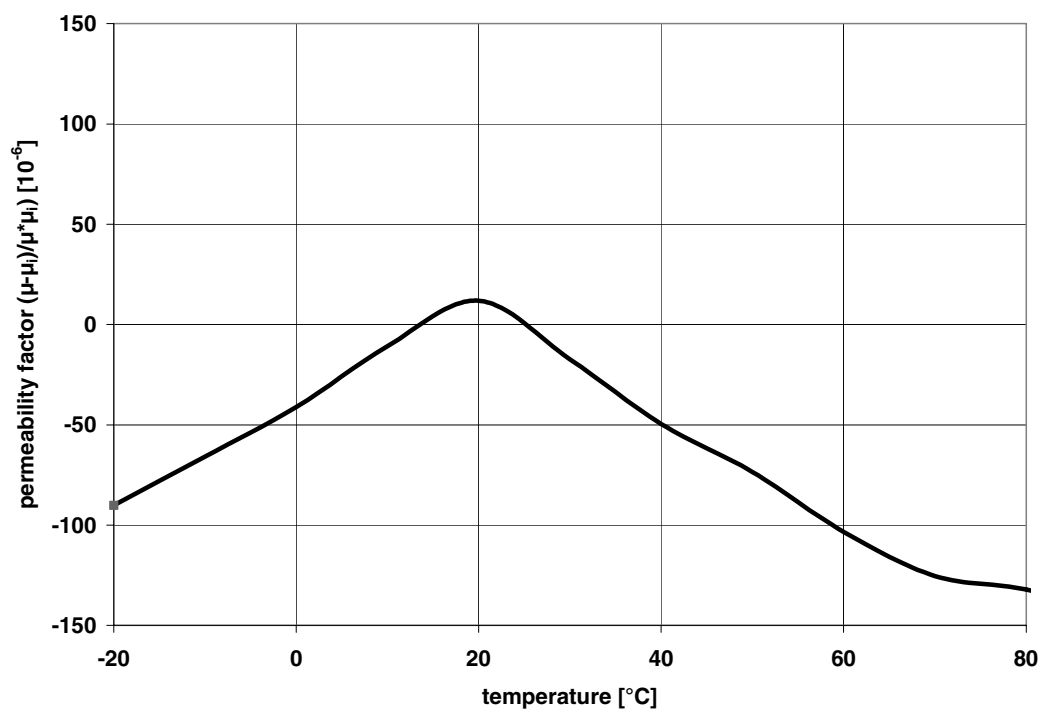
Initial permeability	25 °C	μ_i		3800 +/-25%
Flux density, dyn. 10 kHz, 1200 A/m	25 °C	$B_{\max}$	[mT]	550
	100 °C	$B_{\max}$	[mT]	435
Coercitive field strength f = 10kHz	25 °C	H_C	[A/m]	15
	100 °C	H_C	[A/m]	21
Curie temperature		T_C	[°C]	> 255
Resistivity		ρ	[Ωm]	11
Density		ρ	[kg/m³]	4900
Relative loss factor	at 10 kHz	$\tan\delta/\mu_i$	[10 ⁻⁶]	< 1.0
	at 100 kHz	$\tan\delta/\mu_i$	[10 ⁻⁶]	< 2.0
Relative temperature coeff.	for 5...25 °C	α_F	[10 ⁻⁶ /K]	1.5...3.0
	for 25...55 °C	α_F	[10 ⁻⁶ /K]	- 8.0...- 5.0
Hysteresis material constant	10 kHz	η_B	[10 ⁻⁶ /mT]	< 0.3

Core shape R 29

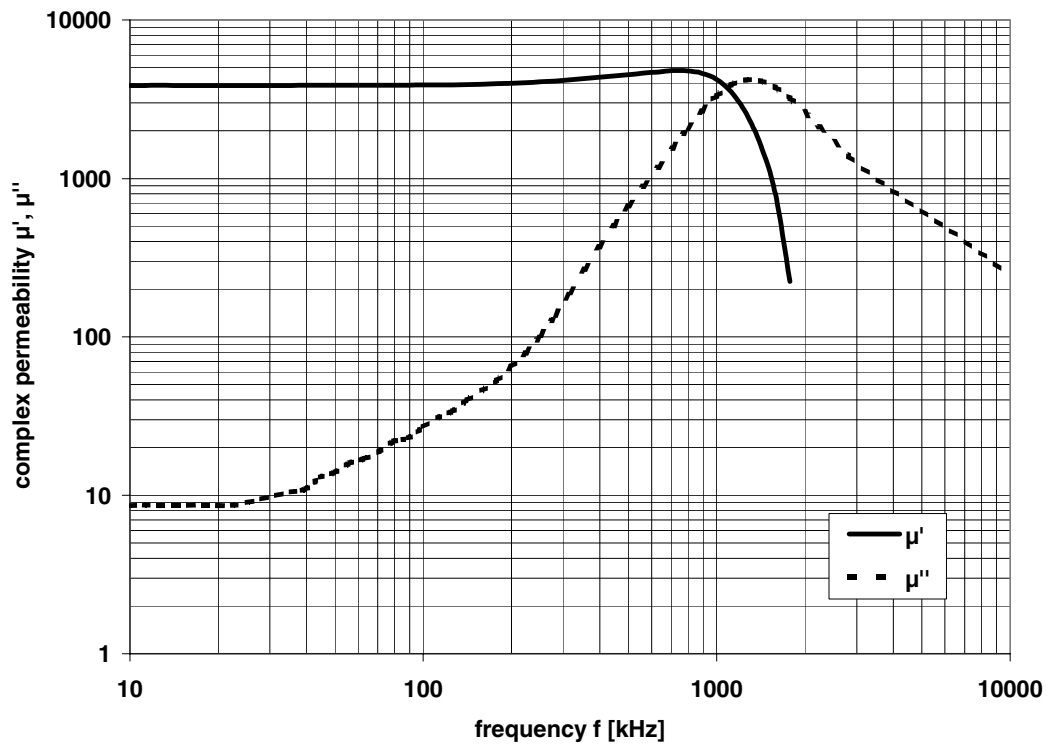
Initial permeability μ_i versus temperature ($f = 10$ kHz, $B = 0.25$ mT)



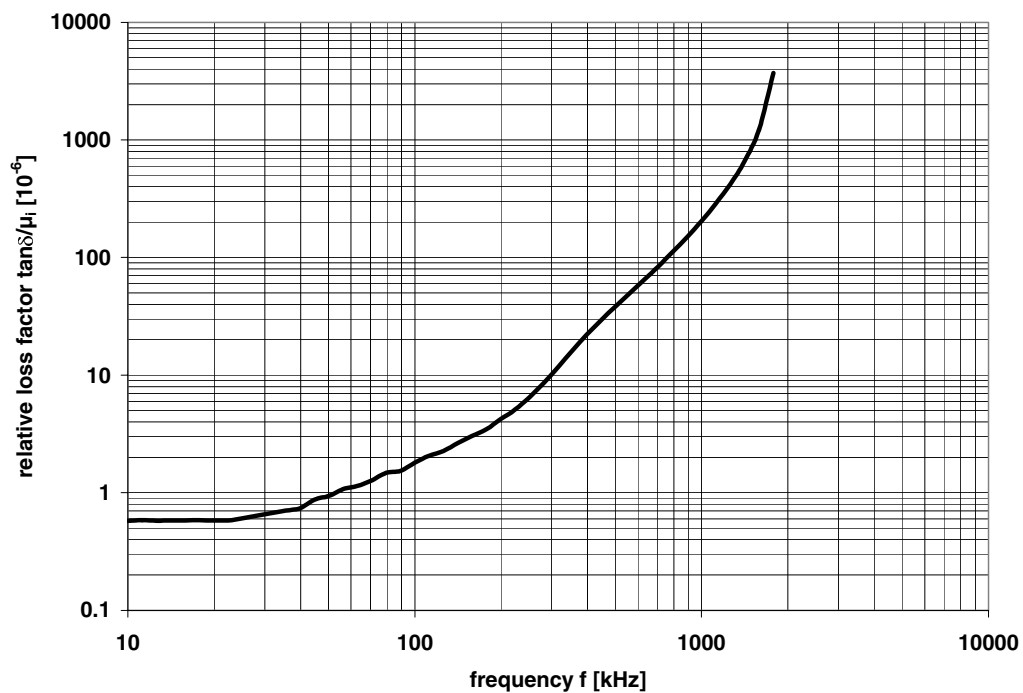
Permeability factor versus temperature ($f = 10$ kHz, $B = 0.25$ mT, $\mu_i \approx 3800$)

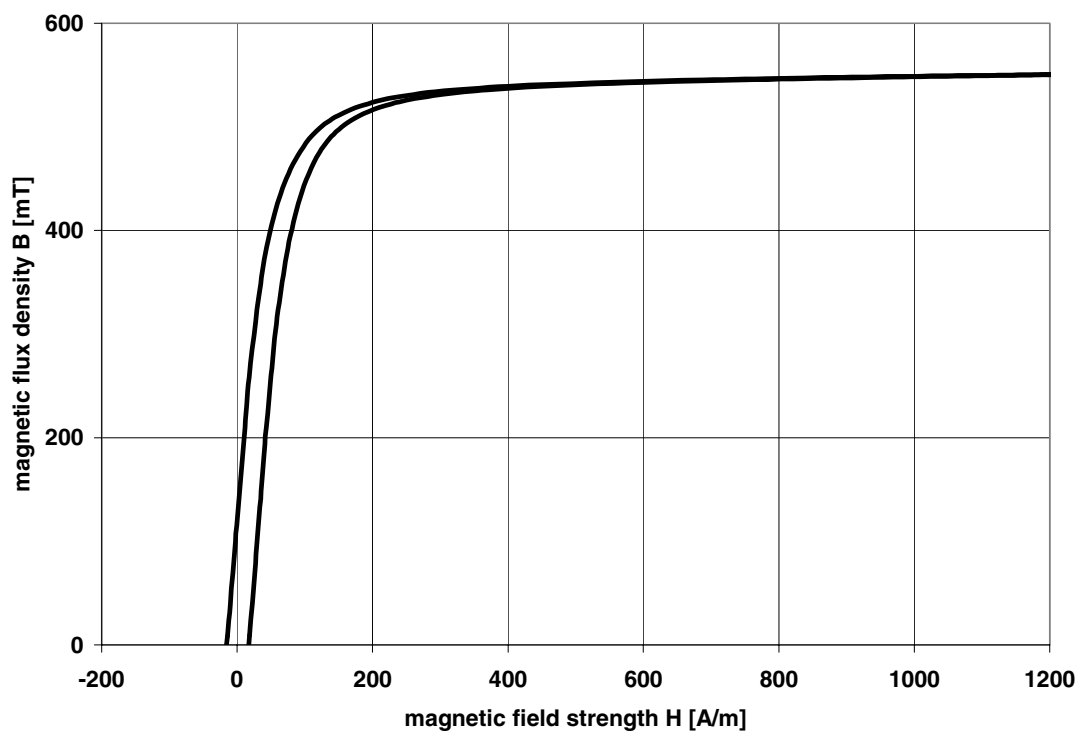
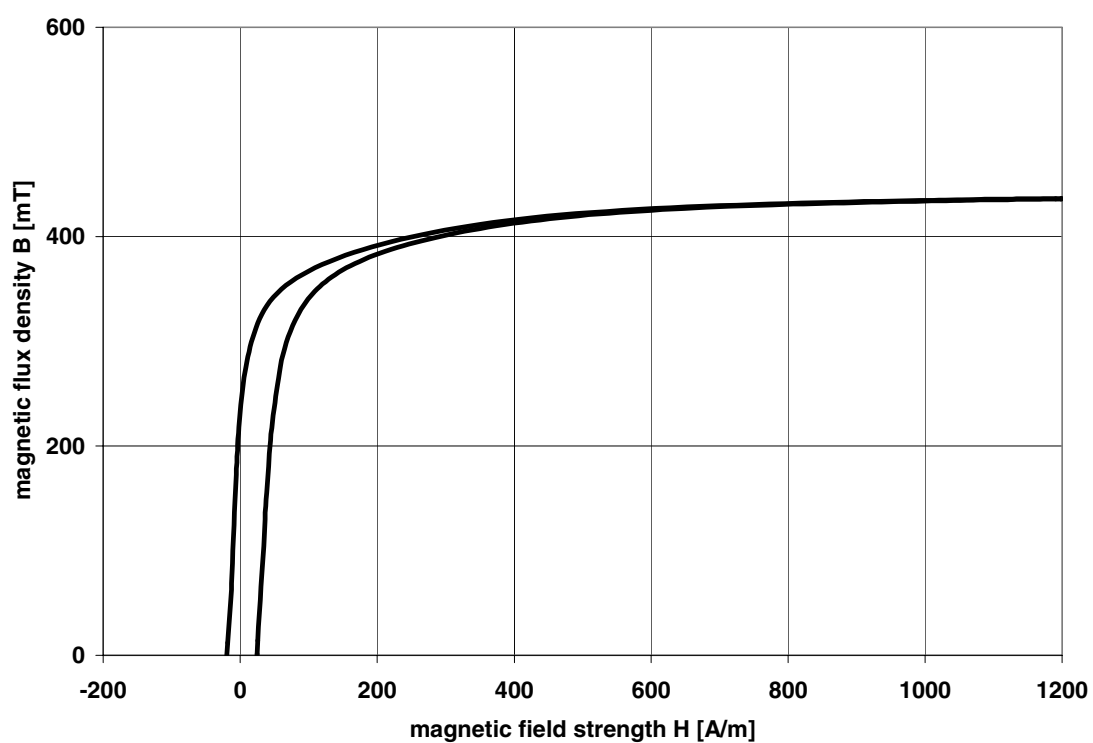


Complex permeability versus frequency ($B = 0.25 \text{ mT}$, $T = 25 \text{ }^{\circ}\text{C}$)

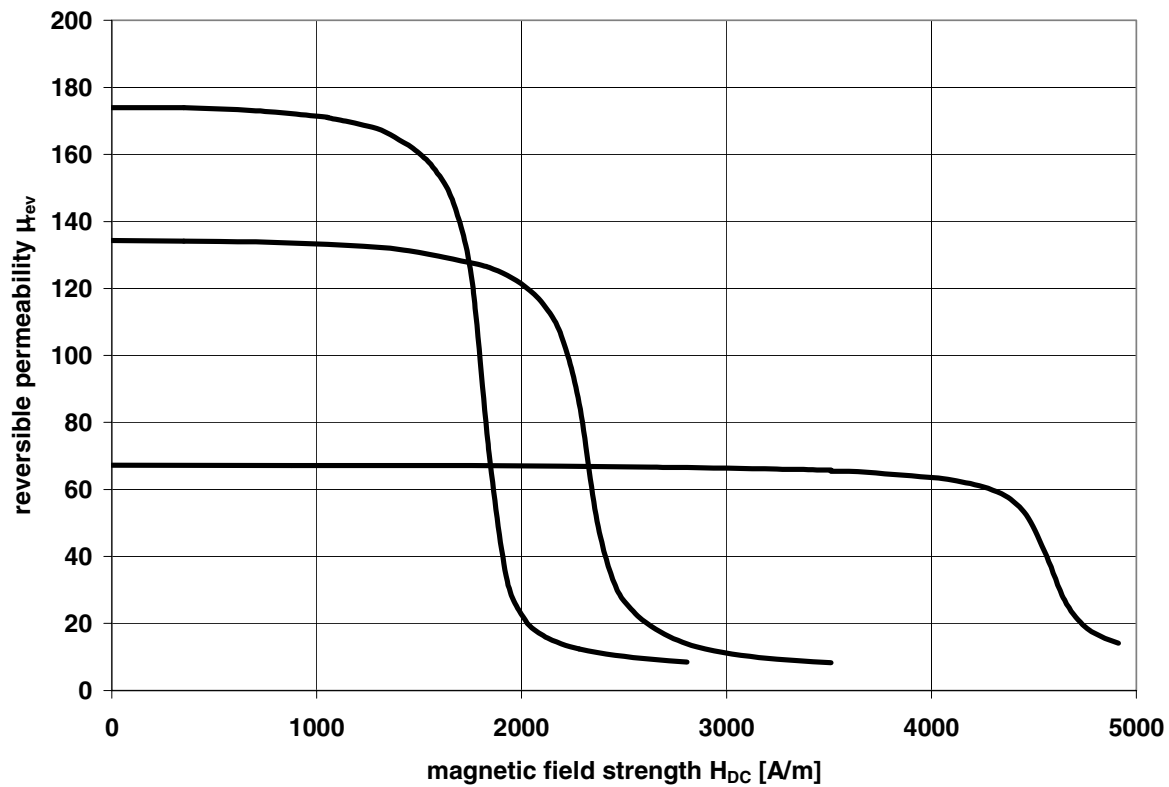


Relative loss factor $\tan \delta/\mu_i$ versus frequency ($B = 0.25 \text{ mT}$, $T = 25 \text{ }^{\circ}\text{C}$)



Dynamic magnetization curves ($f = 10 \text{ kHz}$, $T = 25 \text{ °C}$)

Dynamic magnetization curves ($f = 10 \text{ kHz}$, $T = 100 \text{ °C}$)


DC magnetic bias ($f = 10 \text{ kHz}$, $B = 0.25 \text{ mT}$, $T = 25 \text{ °C}$)



© EPCOS AG 2003. Reproduction, publication and dissemination of this data sheet, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.



中发网 WWW.ZFA.CN

全球最大的PDF中文下载站



中发网
www.zfa.cn

PDF 资料下载尽在中发网