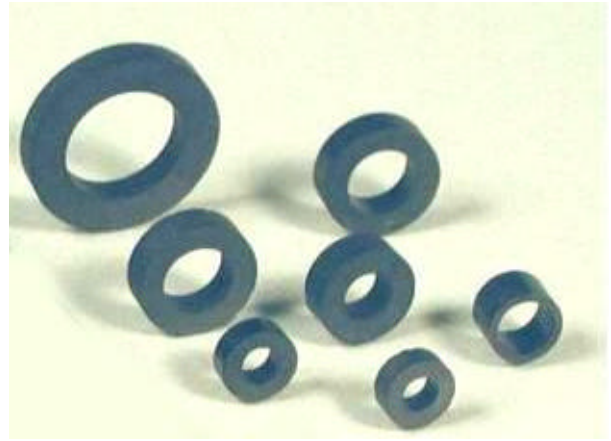





**"FERRITE DOMEN Co." - LEADER OF THE RUSSIAN FERRITE DOMAIN**

**Ferrite Domen Co.** presents ferrite material 2500HMC5 and manufactures ring cores of OD from 4 mm (0.16") to 32 mm (1.26") for **power application** at frequencies over 100 kHz in pulse and sine RF fields.  
New material is analogues to ferrite grades PC40 (TDK) and N67 (EPCOS).



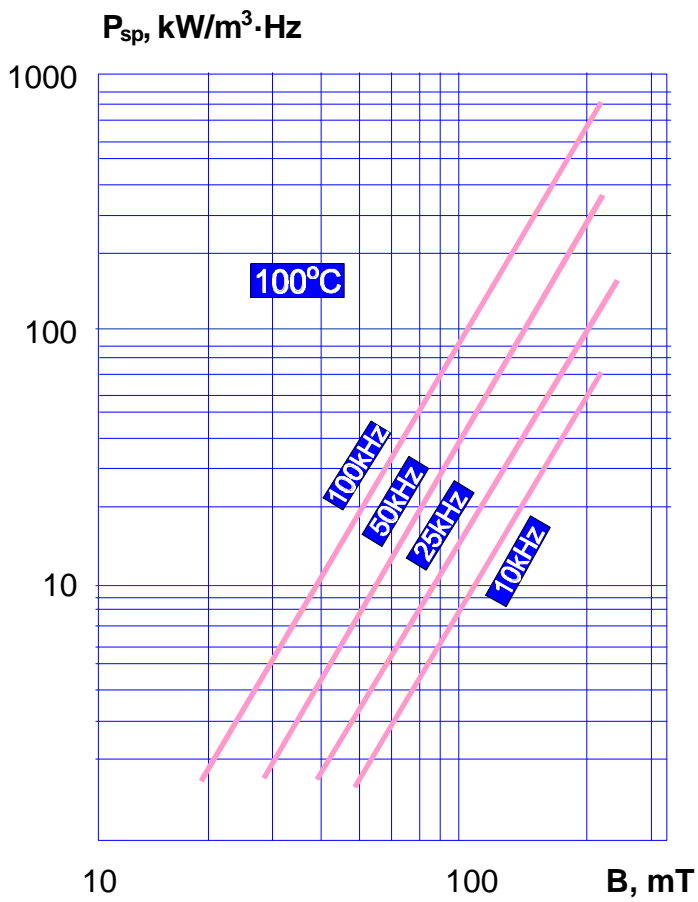
**Characteristics of Power Ferrite Materials**

Specs	Unit	Measuring conditions	Material Grades 		
			2500 HMC1	2500 HMC2	2500 HMC5
$\mu$	—				<b>2000 ± 500</b>
$\mu_{max}$	—	T = + 20 °C	4500	4500	
	—	T = + 120 °C	4100	4100	
$P_{sp}$	$\frac{\mu W}{cm^3 \cdot Hz}$	f = 16 kHz, B <sub>~</sub> = 200mT, t = +25 °C	10.5	8.5	
		f = 16 kHz, B <sub>~</sub> = 200mT, t = +100 °C	8.7	6.0	
		f = 100 kHz, B <sub>~</sub> = 200mT, t = +25 °C			<b>9.0</b>
		f = 100 kHz, B <sub>~</sub> = 200mT, t = +100 °C			<b>7.6</b>
$B$	mT	H <sub>const</sub> = 240 A/m, t = +100 °C	290	330	<b>310</b>
$B_m$	mT	H <sub>const</sub> = 800 A/m, T = +25 °C	450	—	
		H <sub>const</sub> = 1200 A/m, T = +25 °C			<b>450</b>
$B_r$	mT	H <sub>const</sub> = 800 A/m, T = +25 °C	100	—	
		H <sub>const</sub> = 1200 A/m, T = +25 °C			<b>100</b>
$H_c$	A/m	H <sub>const</sub> = 800 A/m, T = +25 °C	16	16	
		H <sub>const</sub> = 1200 A/m, T = +25 °C			<b>12</b>
$T_c$	°C		>200	>200	<b>&gt;220</b>
$r$	Ohm·m		1	1	<b>2</b>
$d$	g/cm <sup>3</sup>		4.9	4.9	<b>4.9</b>

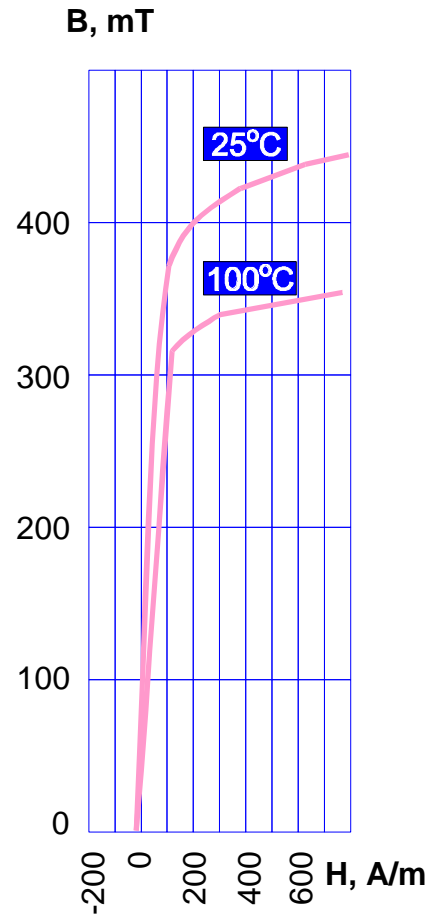
**Symbols**

- |          |                             |       |                     |
|----------|-----------------------------|-------|---------------------|
| $\mu$    | Initial permeability        | $H_c$ | Coercive force      |
| $P_{sp}$ | Specific bulk magnetic loss | $T_c$ | Curie temperature   |
| $B$      | Flux density                | $r$   | Specific resistance |
| $B_m$    | Max. magnetic flux density  | $d$   | Density             |
| $B_r$    | Residual flux density       |       |                     |

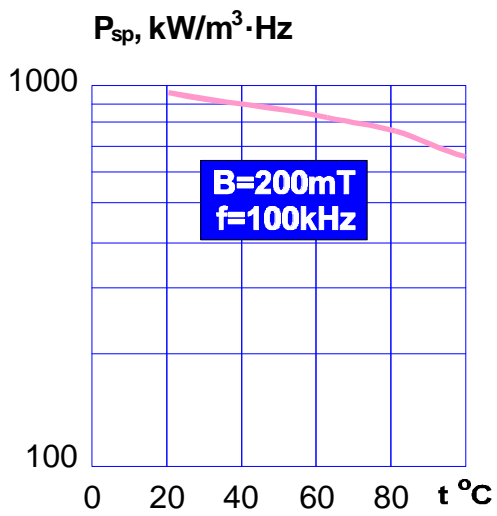
# MnZn Power ferrites



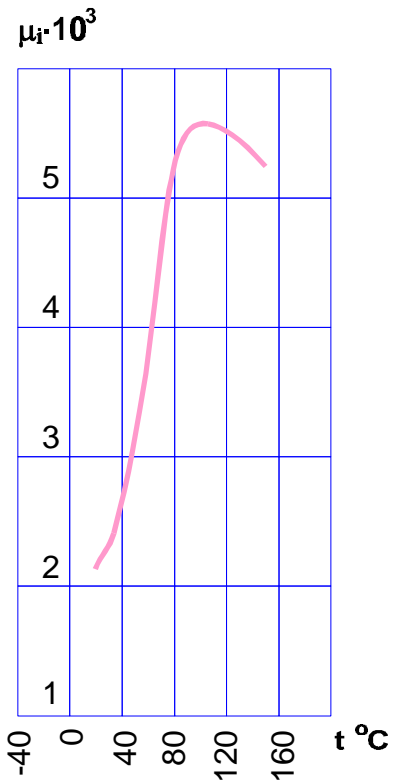
Specific magnetic loss vs induction at different frequencies



B-H curves at different frequencies



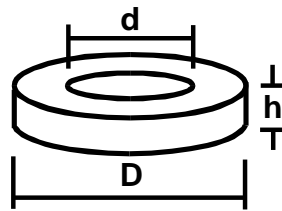
Specific magnetic loss vs temperature



Initial magnetic permeability curve over operation frequency range

**Type****K – Ring Cores**

K 4×2,5×1,2  
K 4×2,5×1,5  
K 4×2,5×1,6  
K 5×2×1,5  
K 5×3×1  
K 5×3×1,5  
K 7×4×2  
K 10×6×3  
K 12×5×5,5  
K 12×6×4,5  
K 12×8×3  
K 14×9×4,5  
K 16×10×4,5  
K 20×12×6  
K 25×15×12  
K 28×16×8  
K 28×16×9  
K 32×20×6  
K 32×20×9



**K D×d×h**  
(mm)

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