

# Mn-Zn 功率鐵氧體材料特性

## Mn-Zn Power Ferrite Material Characteristics

特性 Characteristics		單位 Unit	JPP-4	JPP-44	JPP-44A	
		Unit				
初始磁導率 $\mu_i$ Initial permeability		—	2300±25%	2400±25%	2400±25%	
振幅磁導率 $\mu_a$ Amplitude permeability		—	3000 min	3000 min	3000 min	
飽和磁通密度 $B_s$ Saturation flux density at 1194A/m	25°C	mT	500	510	530	
	100°C	mT	390	390	410	
剩磁 $B_r$ Remanence	25°C	mT	100	110	180	
	100°C	mT	55	60	60	
矯頑力 $H_c$ Coercivity	25°C	A/m	14	13	13	
	100°C	A/m	9	6.5	6	
磁芯損耗 $P_c$ Core loss	100kHz 200mT	25°C	kw/m <sup>3</sup>	600	600	600
		60°C	kw/m <sup>3</sup>	460	400	400
		80°C	kw/m <sup>3</sup>	—	—	—
		100°C	kw/m <sup>3</sup>	410	300	280
		120°C	kw/m <sup>3</sup>	—	380	380
電阻率 $\rho$ Electrical resistivity		Ω-m	6	6.5	6.5	
居裏溫度 $T_c$ Curie Temperature		°C	>215	>215	>215	
密度 Density		kg/m <sup>3</sup>	4.8x10 <sup>3</sup>	4.8x10 <sup>3</sup>	4.8x10 <sup>3</sup>	
磁芯種類 Core Type		—	CC、EE、EF、EI、EP、EIR			
			EER、EFD、OR、PJ、PQ、RM			

Test core: OD=25mm TH=8mm ID=15mm

# Mn-Zn 高磁導率鐵氧體材料特性

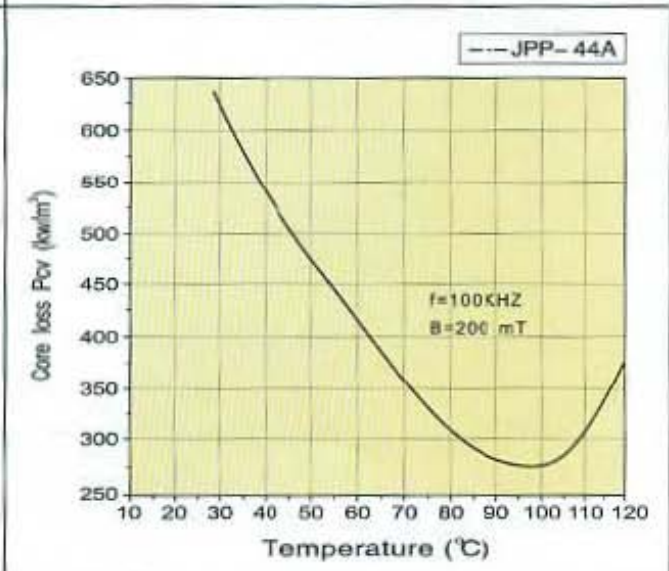
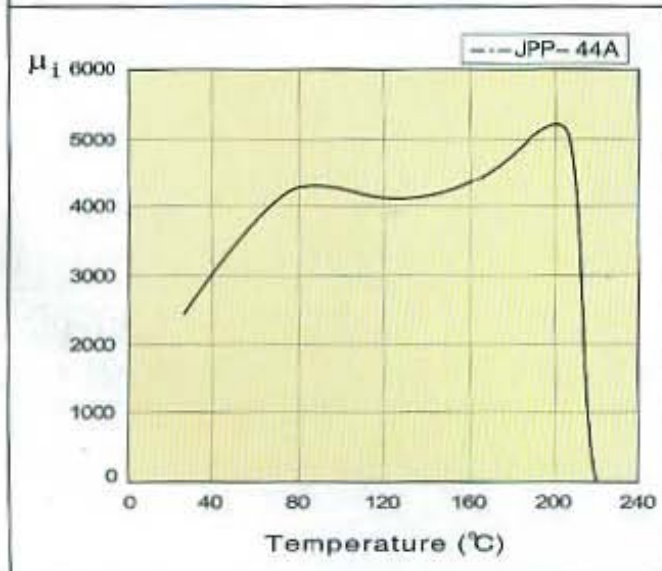
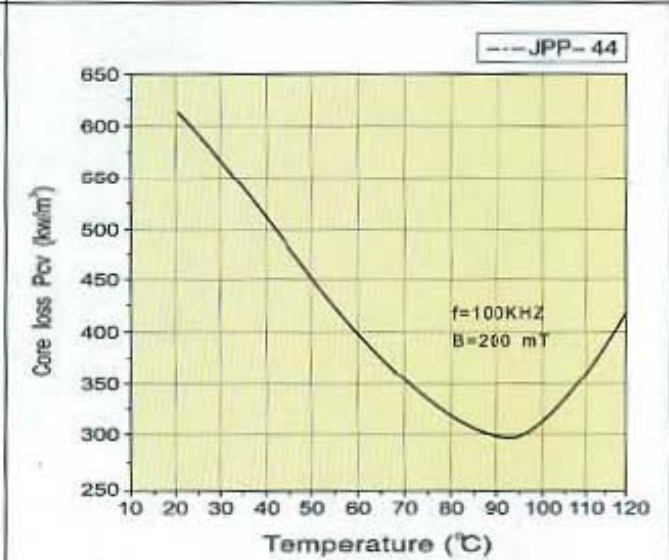
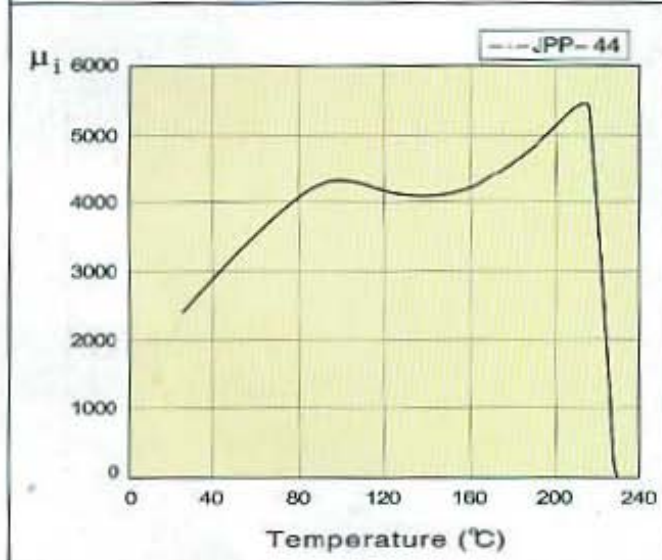
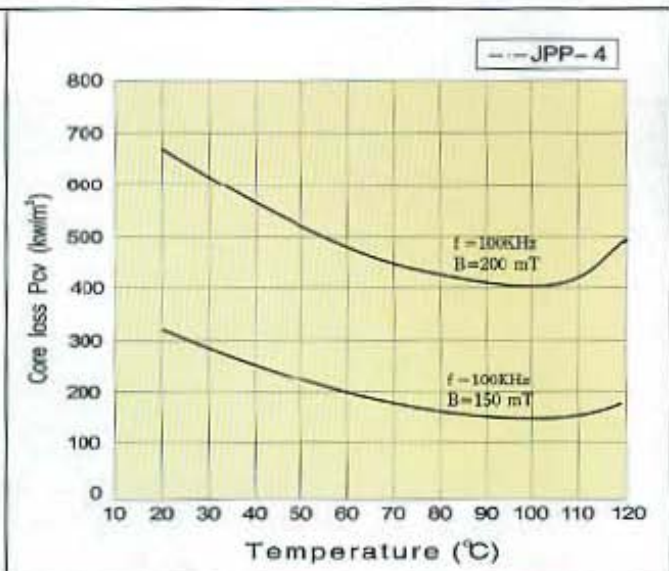
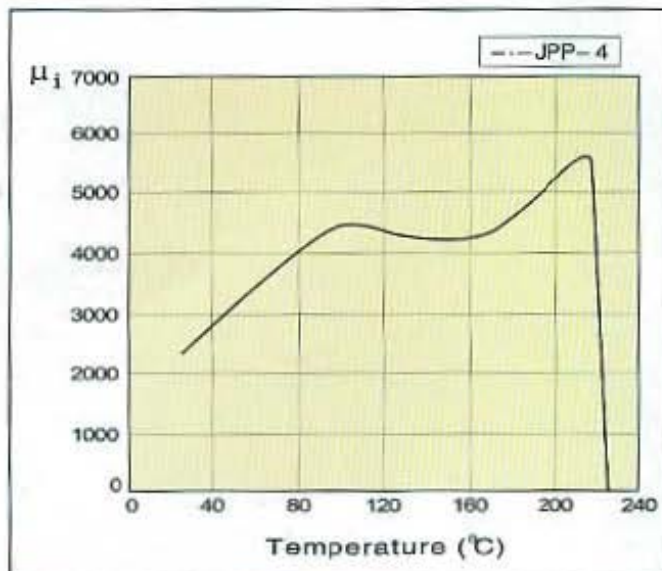
## Mn-Zn High Permeability Ferrite Material Characteristics

特性 Characteristics	單位	JPH-5	JPH-7	JPH-10
	Unit			
初始磁導率 $\mu_i$ Initial permeability	—	5000±25%	7000±25%	10000±30%
比損失因子 $\tan\delta/\mu_i$ Relative loss factor	$10^{-6}$	<6.5 (10kHz)	<6.5 (10kHz)	<7.0 (10kHz)
初始磁導率相對溫度係數 $\alpha_{\mu r}$ Temperature factor of initial permeability $\alpha_{\mu r}$	$10^{-6}$	-0.5 ~ 3.0 (20°C ~ 60°C)	-0.5 ~ 3.0 (20°C ~ 60°C)	-0.5 ~ 2.0 (20°C ~ 60°C)
飽和磁通密度 $B_s$ Saturation flux Density H=1194A/m	mT	420	410	400
剩磁 $B_r$ Remanence	mT	140	135	90
矯頑力 $H_c$ Coercivity	A/m	8	7.5	7.5
電阻率 $\rho$ Electrical resistivity	$\Omega\text{-m}$	2	0.15	0.1
減落因子 $D_f$ Disaccommodation factor	$10^{-4}$	<3.5	<3.5	<3.0
居裏溫度 $T_c$ Curie Temperature	°C	>135	>125	>120
密度 Density	$\text{kg/m}^3$	$4.8 \times 10^3$	$4.9 \times 10^3$	$4.9 \times 10^3$
磁芯種類 Core Type	—	EE、EI、UU RM、EP、OR	EE、EI、UU RM、EP、OR	EE、EI、UU RM、EP、OR

Test core: OD=25mm TH=8mm ID=15mm

# JPP-4、JPP-44、JPP-44A 材料特性曲線圖

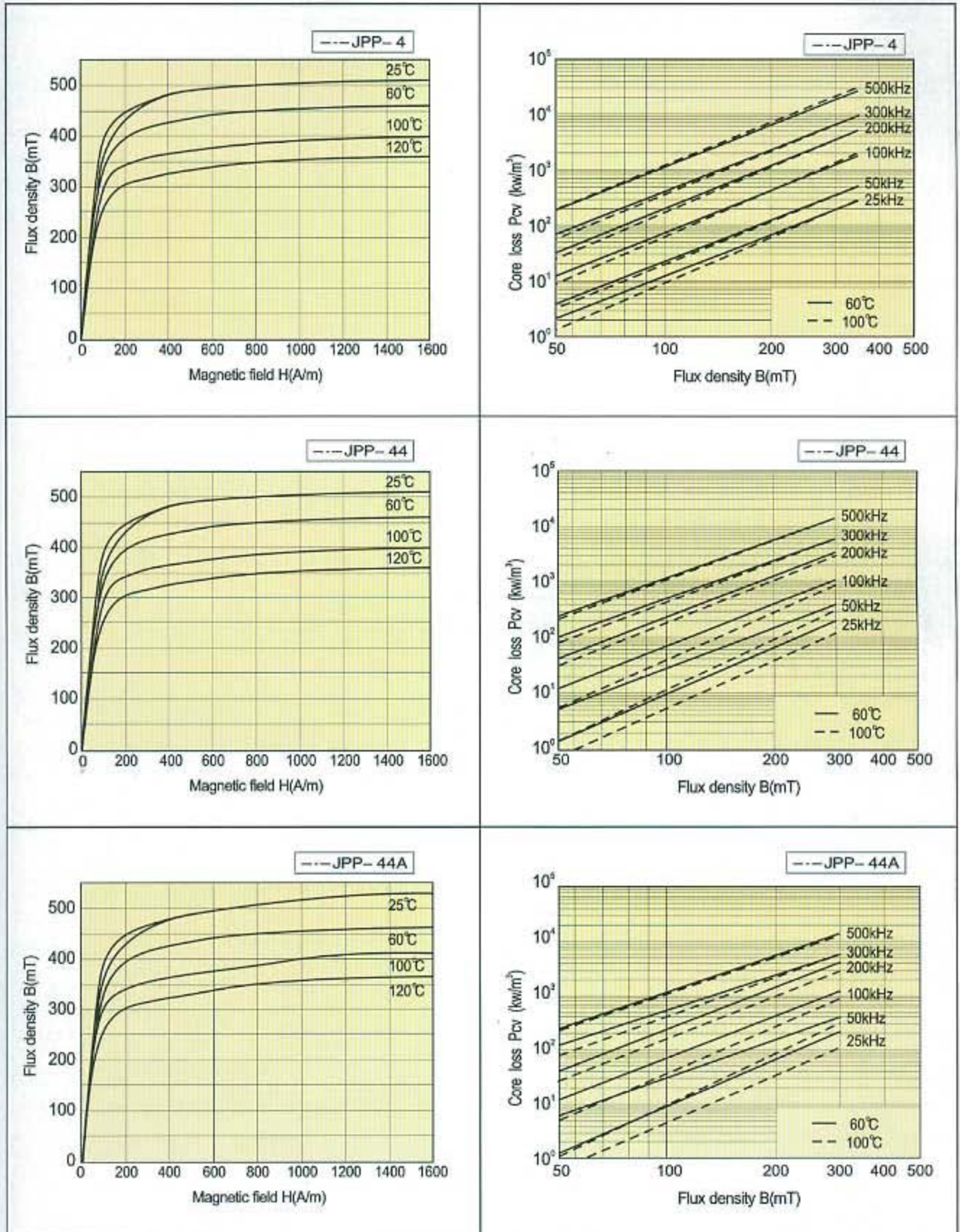
## Curve Graph of JPP-4、JPP-44、JPP-44A Material Characteristics



Test core: OD=25mm TH=8mm ID=15mm

# JPP-4、JPP-44、JPP-44A 材料特性曲綫圖

## Curve Graph of JPP-4、JPP-44、JPP-44A Material Characteristics



Test core: OD=25mm TH=8mm ID=15mm