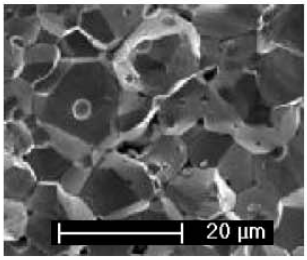
TDG

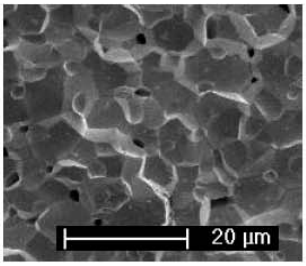
High frequency low core loss MnZn power material TP5B

For high frequency using,TDG has developed its power material TP5,but its maximum working frequency is not far above 1MHz. It can't fit for higher frequency using(such as some high technology area) . To improve the using frequency of MnZn power ferrite,TDG introduced high frequency low core loss MnZn power material TP5B.

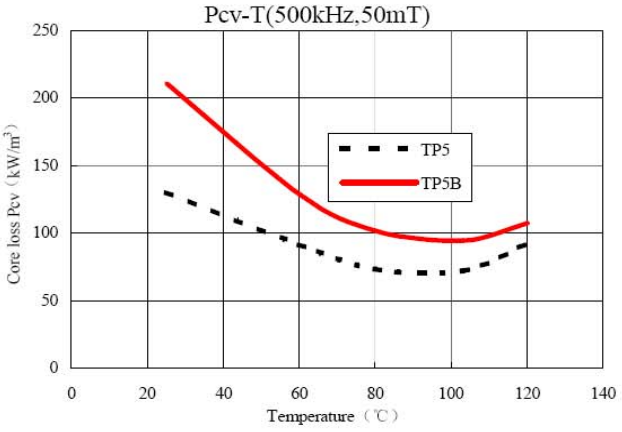
Because of the smaller grain, TP5B possesses a large electrial resistivity. And for this reason its core loss at high frequency is very low (specially after 1MHz) and this can benefit its high frequency performance. Transformers made with TP5B can be used from 1MHz to 3MHz.

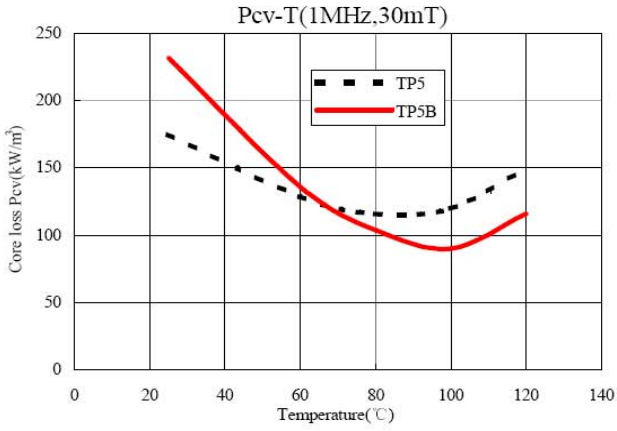


TP4 grain structure



TP5B grain structure





*The material is recommended for new design

A POWERFUL SOLUTION™

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Web: www.mhw-intl.com

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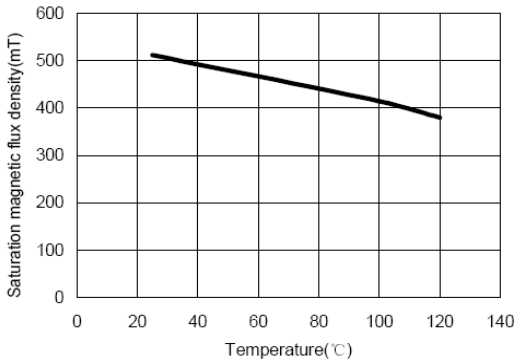
Material : TP5B

Features:

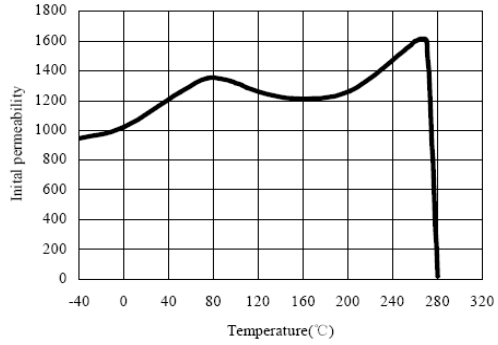
1. Mostly used at high Frequency.(From 1MHz to 3MHz)
2. Low Core Loss and High Bs .
3. The minimum Core Loss is around 100℃

Bs-Temperature



Initial permeability	μ_i	25℃	1200±25%
Saturation magnetic flux density	Bs(mT)	25℃	510
	1194A/m	100℃	410
Core Loss	1MHz	25℃	250
Pcv (kW/m^3)	30mT	100℃	100
	3MHz	25℃	350
	10mT	100℃	230
Curie temperature	Tc(℃)		265
Electrial resistivity	ρ (Ω·m)		9
Density	d(kg/m^3)		4.7×10^3

μ_i-Temperature



*All specifications are subject to change without notice.

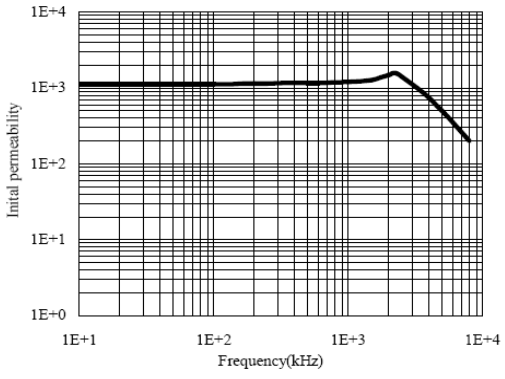
Test core: Toroid(mm)

OD:25

ID:15

H:7.5

μ_i-Frequency



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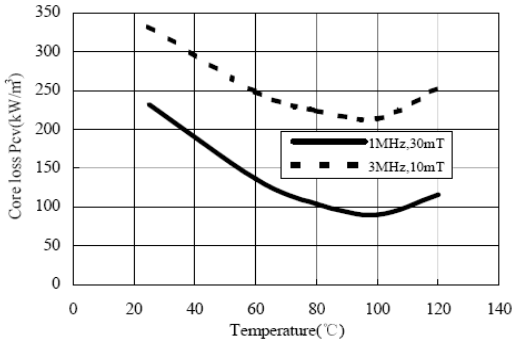
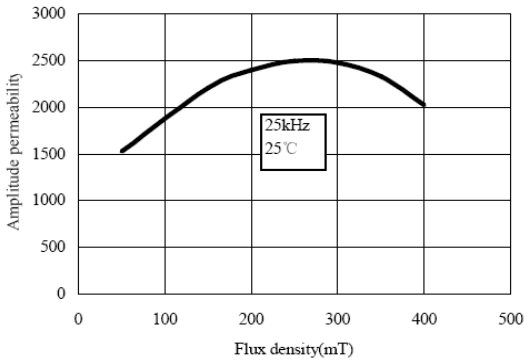
Material:TP5B

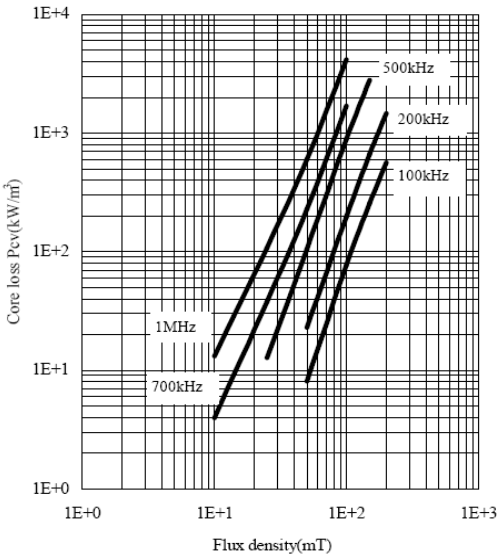
Pcv-Temperature



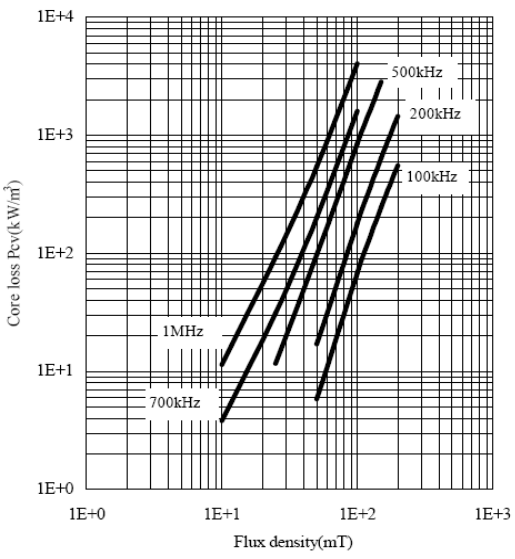
μ_a-B_m



Pcv-B_m(80℃)



Pcv-B_m(100℃)



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