

DATA SHEET

MF93S

High Frequency and Low loss material

recommended to use at frequencies of 500KHz~3MHz.

2023/03/02



高科磁技股份有限公司
中鋼集團

Materials specification

MF93S

MF93S SPECIFICATIONS

	CONDITIONS	VALUE	UNIT
μ_i	25°C; ≤ 10 kHz; 0.25 mT	700± 20%	
μ_a	100°C; 25 kHz; 200 mT	1250	
Bs	25°C; 10 kHz; 1200 A/m 100°C; 10 kHz; 1200 A/m	530 430	mT
Br	25°C; 10 kHz; 1200 A/m 100°C; 10 kHz; 1200 A/m	100 105	mT
Hc	25°C; 10 kHz; 1200 A/m 100°C; 10 kHz; 1200 A/m	59 52	A/m
Pv	25°C; 1000 kHz; 50 mT 100°C; 1000 kHz; 50 mT 25°C; 3000 kHz; 30 mT 100°C; 3000 kHz; 30 mT	70 80 160 230	kW/m ³
ρ	DC; 25°C	10	$\Omega \cdot m$
Tc		≥ 290	°C
Density		4750	kg/m ³

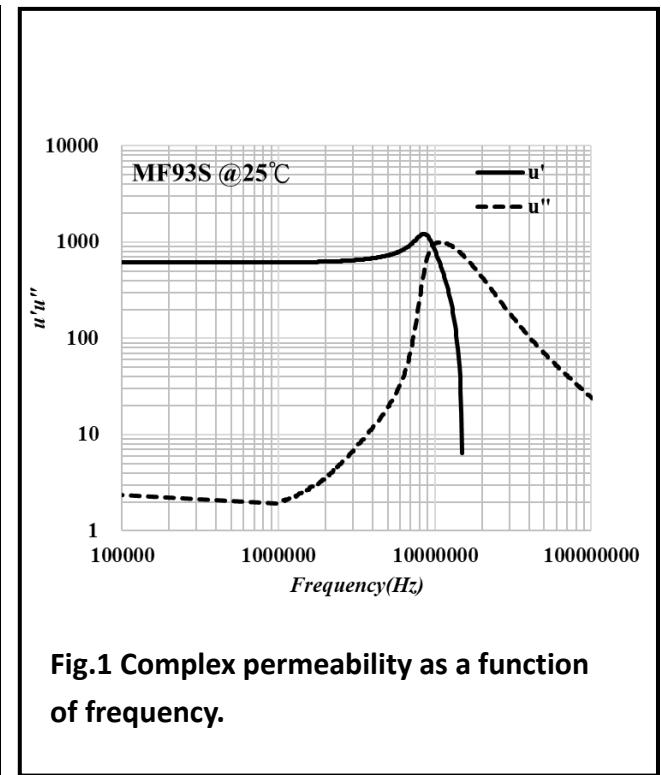


Fig.1 Complex permeability as a function of frequency.

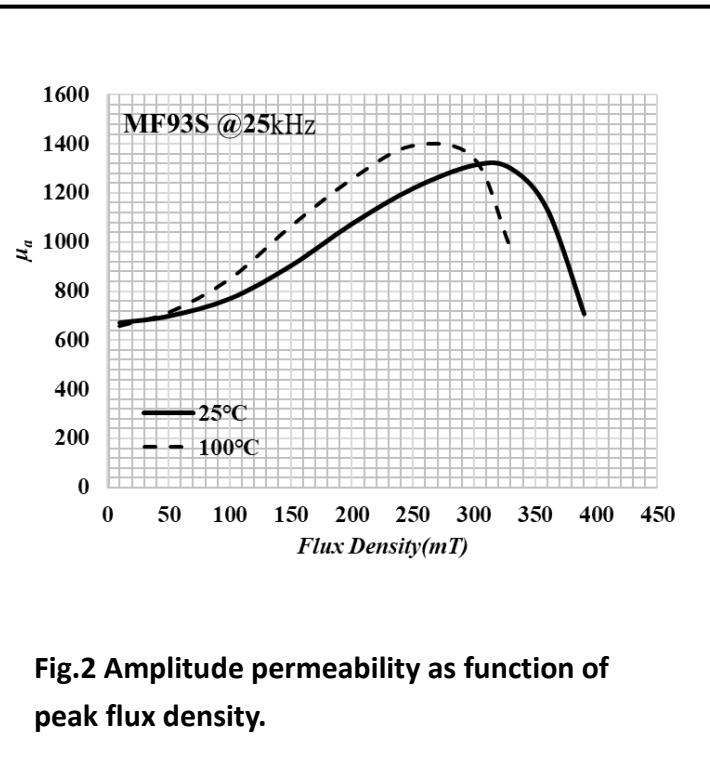


Fig.2 Amplitude permeability as function of peak flux density.

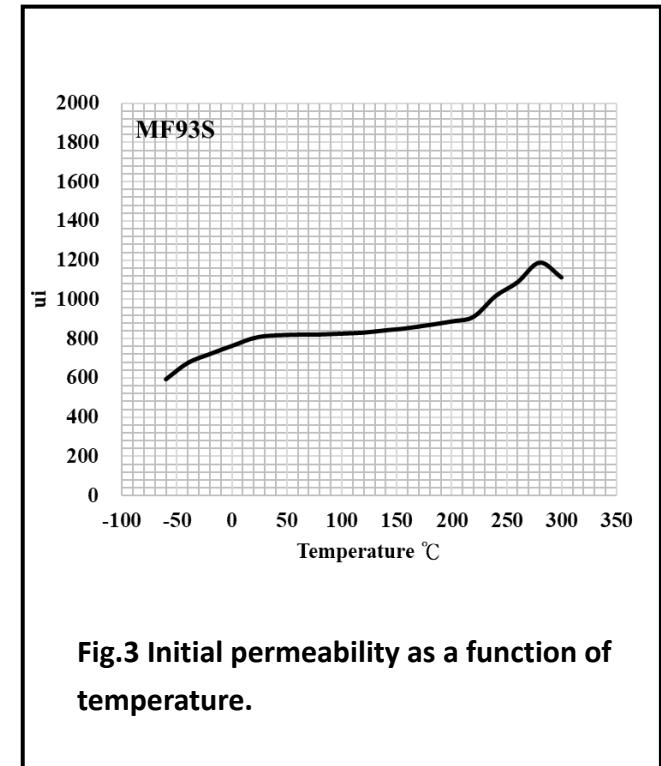


Fig.3 Initial permeability as a function of temperature.

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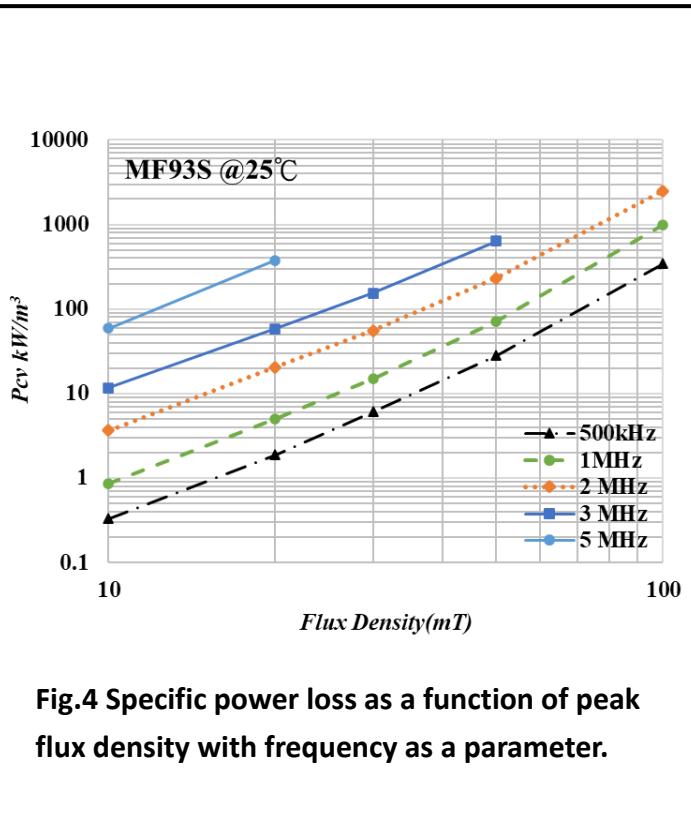


Fig.4 Specific power loss as a function of peak flux density with frequency as a parameter.

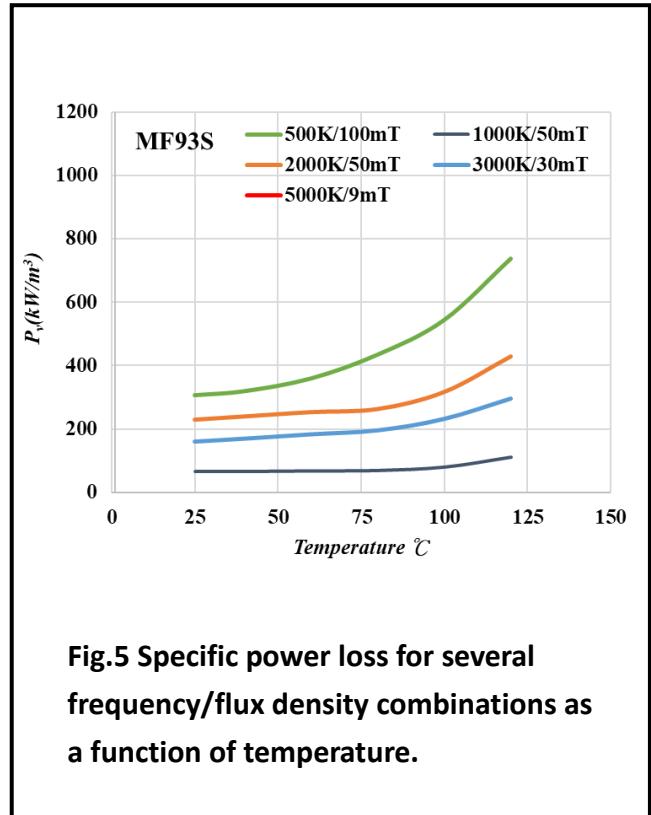


Fig.5 Specific power loss for several frequency/flux density combinations as a function of temperature.

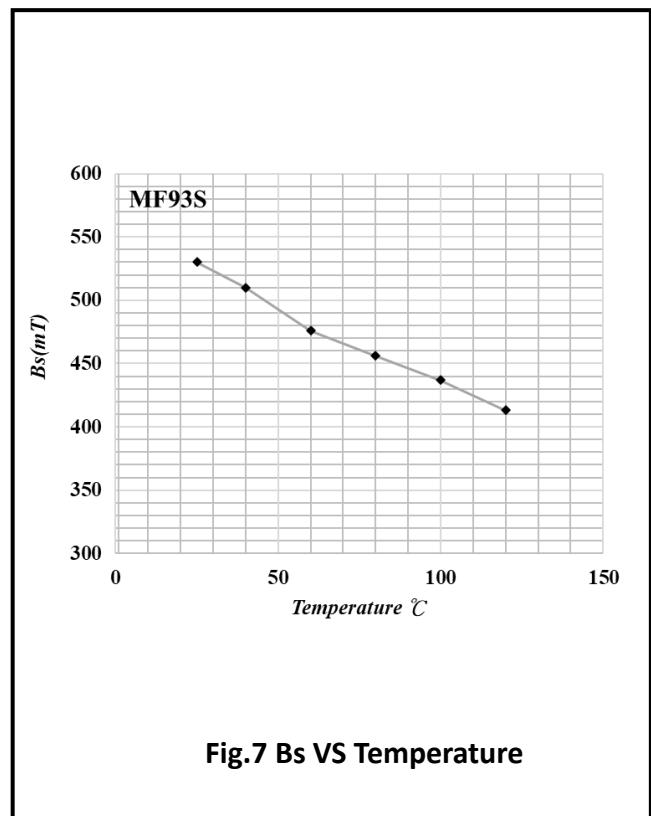


Fig.6 Typical B-H loops of 25°C & 100°C

Fig.7 Bs VS Temperature

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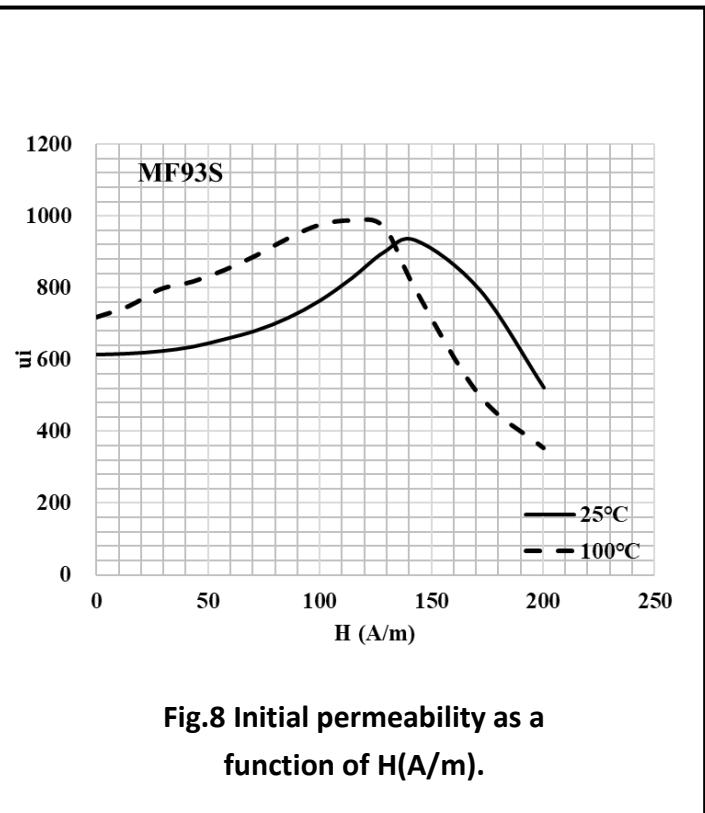
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Fig.8 Initial permeability as a function of H (A/m).