

# DATA SHEET

## MF37A

**High Frequency and Low loss material**

**recommended to use at frequencies of 500KHz~800KHz.**

2023/05/31



高科磁技股份有限公司  
中鋼集團

## Materials specification

MF37A

## MF37A SPECIFICATIONS

	CONDITIONS	VALUE	UNIT
$\mu_i$	25°C; $\leq 10$ kHz; 0.25mT	$2100 \pm 20\%$	
$\mu_a$	25°C; $\leq 100$ kHz; 200mT	1900	
B	25°C; 10 kHz; 1200A/m 100°C; 10 kHz; 1200A/m	520 430	mT
Br	25°C; 10 kHz; 1200A/m 100°C; 10 kHz; 1200A/m	88 74	mT
Hc	25°C; 10 kHz; 1200A/m 100°C; 10 kHz; 1200A/m	17 15	A/m
Pv	100°C; 500kHz; 50mT 25°C; 500kHz; 100mT 100°C; 500kHz; 100mT	85 630 630	kW/m <sup>3</sup>
$\rho$	DC; 25°C	12	$\Omega \cdot m$
Tc		$\geq 250$	°C
Density		4750	kg/m <sup>3</sup>

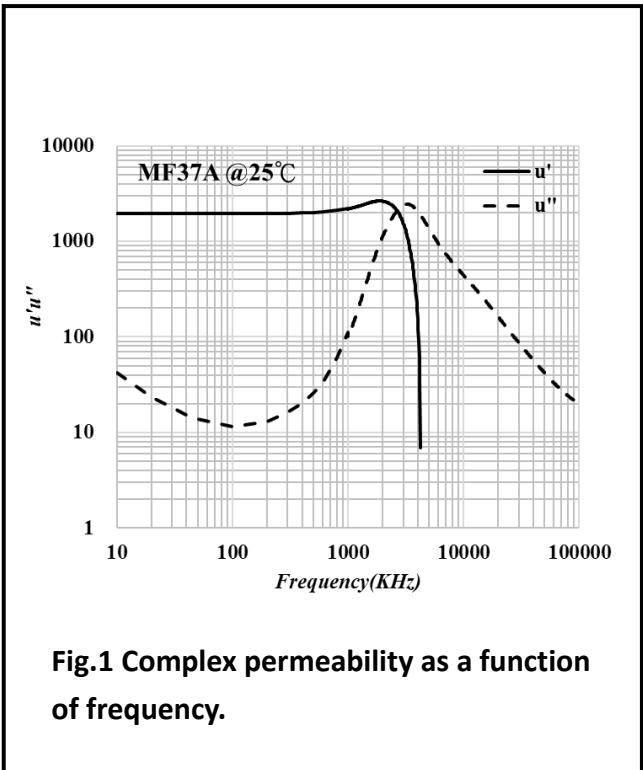


Fig.1 Complex permeability as a function of frequency.

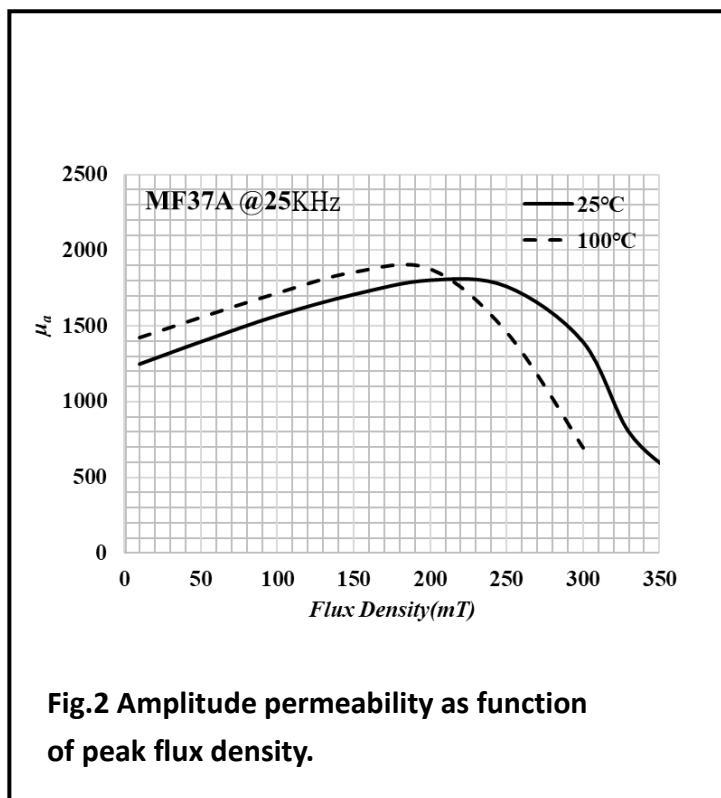


Fig.2 Amplitude permeability as function of peak flux density.

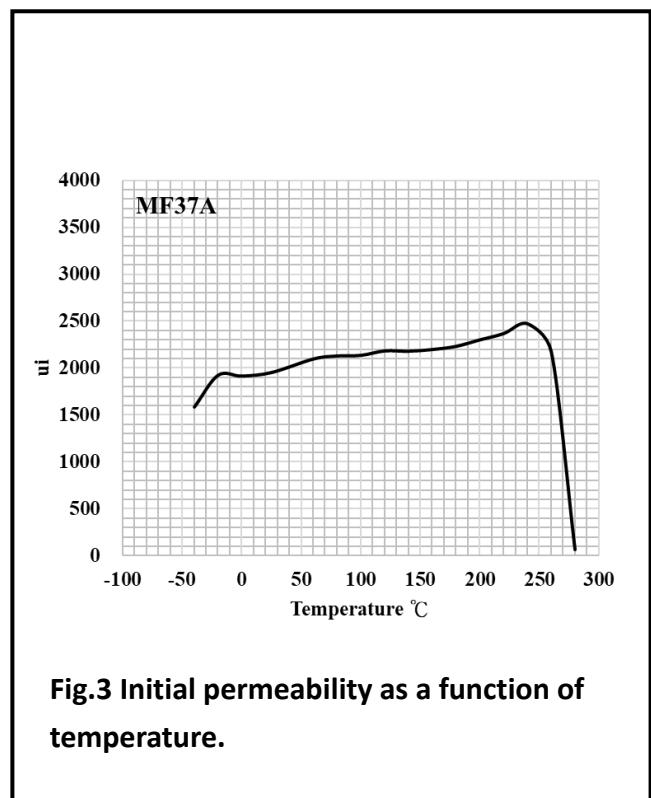


Fig.3 Initial permeability as a function of temperature.

## Materials specification

MF37A

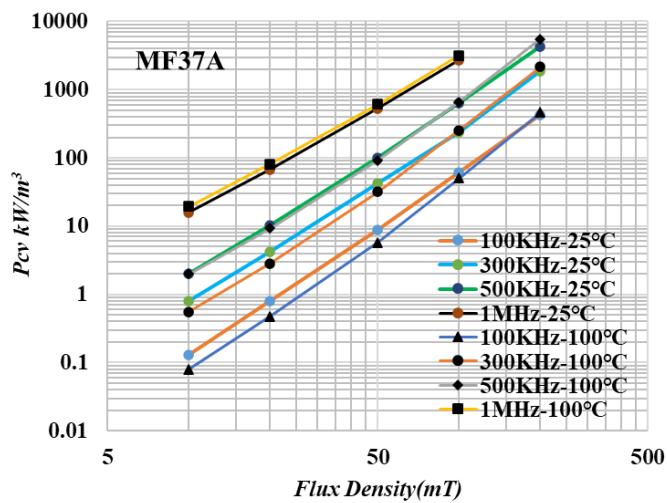


Fig.4 Specific power loss as a function of peak flux density with frequency as a parameter.

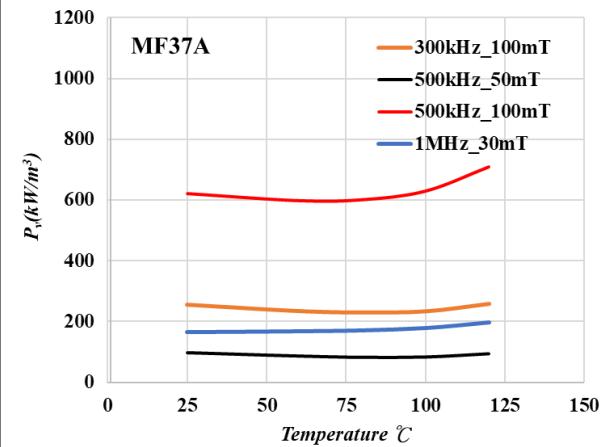


Fig.5 Specific power loss for several frequency/flux density combinations as a function of temperature.

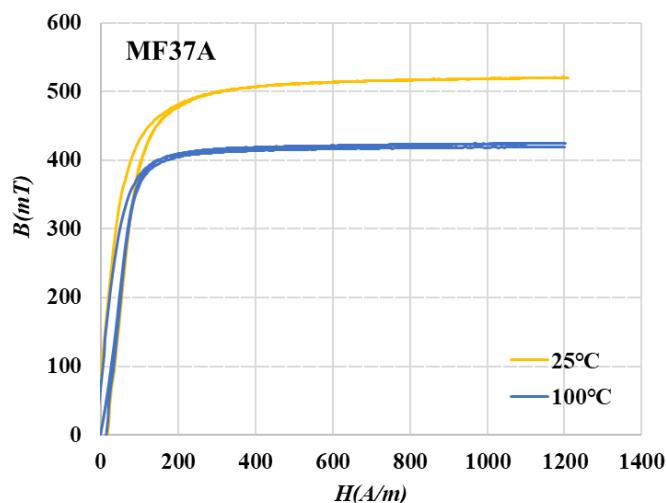


Fig.6 Typical B-H loops of 25°C & 100°C

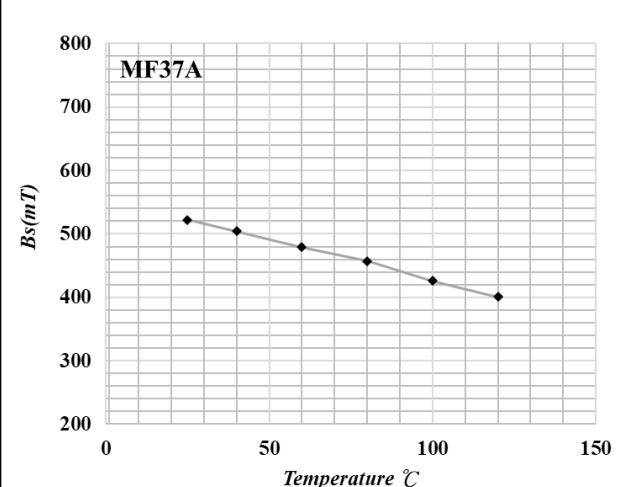


Fig.7 Bs VS Temperature