

# Soft Magnetic Alloy Powder

## Sendust

Soft magnetic alloy powders are made by atomization melting alloy of iron, silicon and aluminum.

### Advantages:

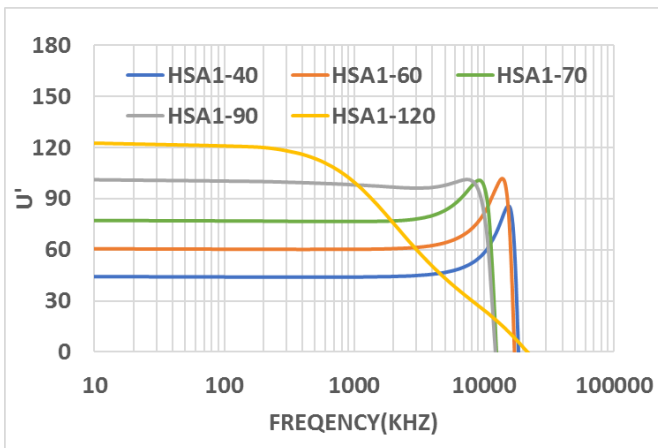
- low core losses at elevated frequencies
- High saturation flux density (compared with Ferrite)
- Low magnetostriction (low noise)
- Stable performance at high temperature
- Variety of shapes available (E Cores, U Cores, Blocks, Segmented Cores, etc.)

SMC powder	Permeability	Particle size D50(um)	Ldc/Lo(%) (45Oe)	Core Loss 100k-100mT	Density (g/cm <sup>3</sup> )
HSA1-40	40	28	>82%	<750	5.1
HSA1-60	60	40	>67%	<750	5.3
HSA1-70	70	40	>52%	<750	5.4
HSA1-90	90	55	>45%	<900	5.4
HSA1-120	120	120	>39%	<900	5.6

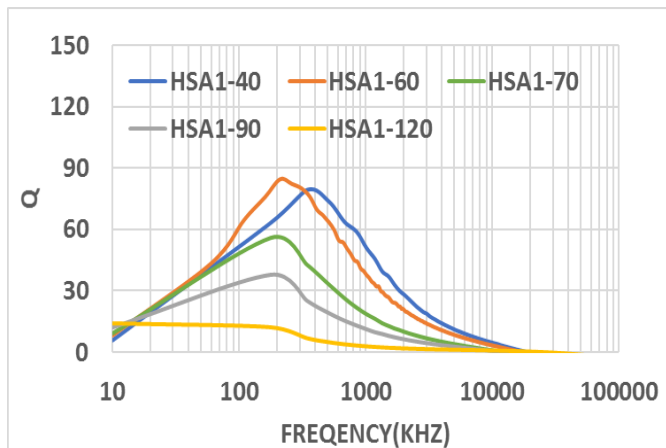
\*Power loss unit: kW/m<sup>3</sup>

\*Permeability: 10K-500mV

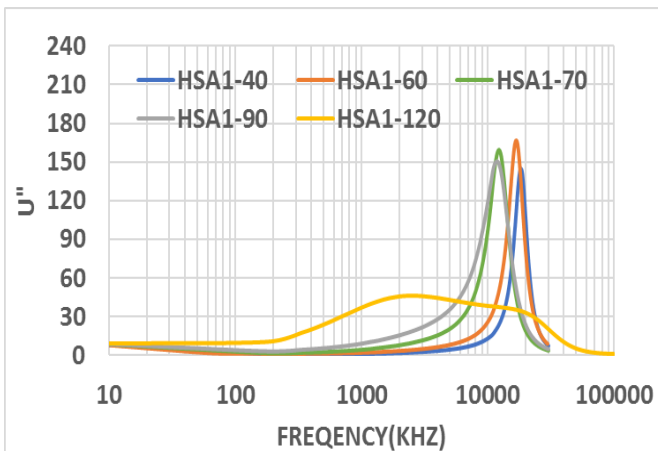
### ■ u' VS Frequency



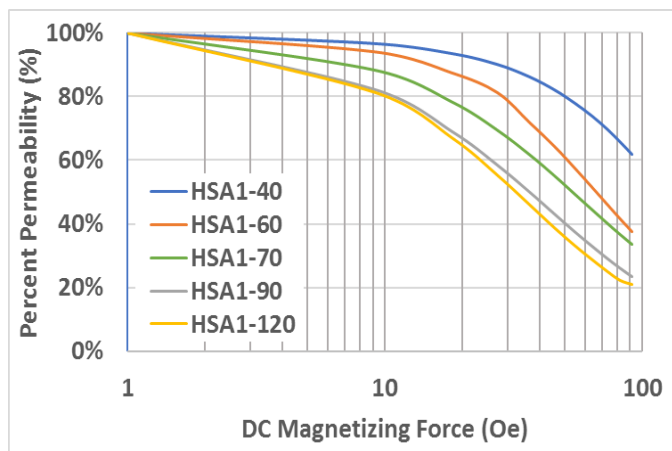
### ■ Q VS Frequency



### ■ u'' VS Frequency



### ■ DC-bias

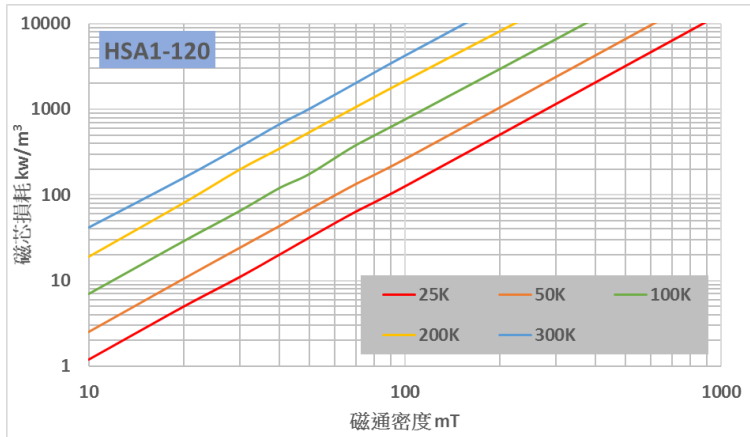
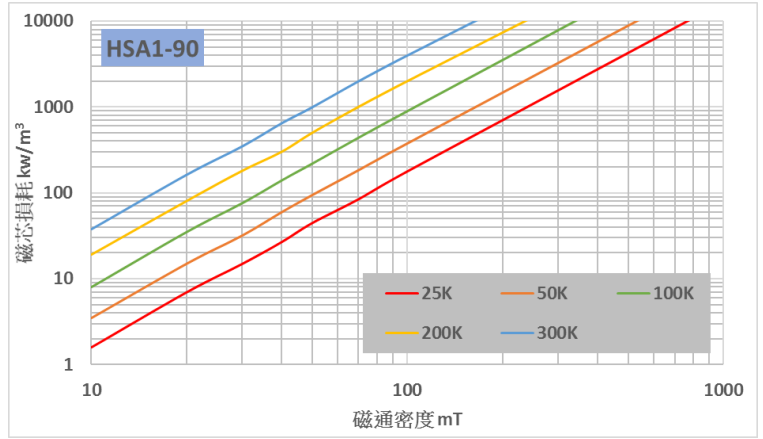
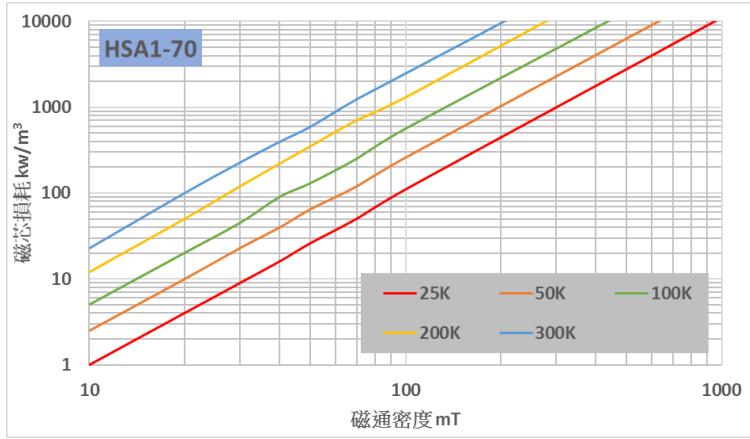
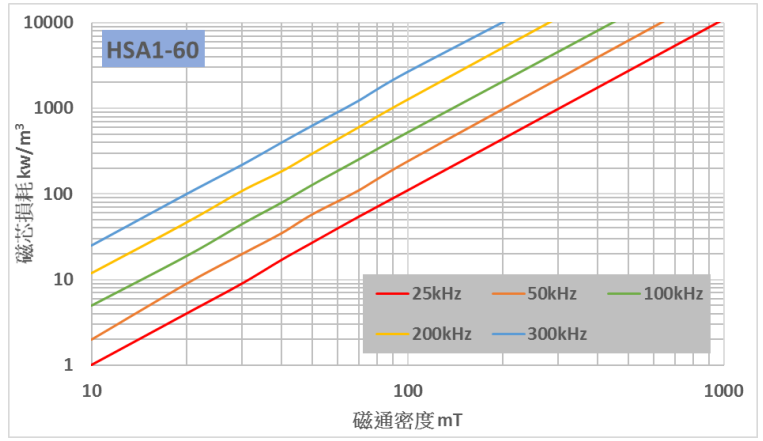
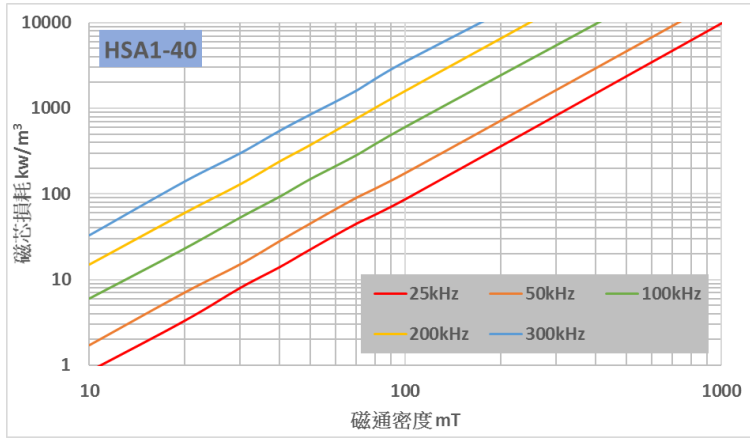


高科磁技股份有限公司  
中鋼集團

**HIMAG Magnetic Corporation**  
**China Steel Group**

24-1, Chien-Kuo Rd., Nei-Pu Industrial Dist.  
Ping-Tung county, Taiwan  
Tel : 886-8-778-0222 Fax : 886-8-778-0226  
Sales >> Sales @himag.com.tw

## ■ Core Loss



## ■ Permeability Vs Temperature

