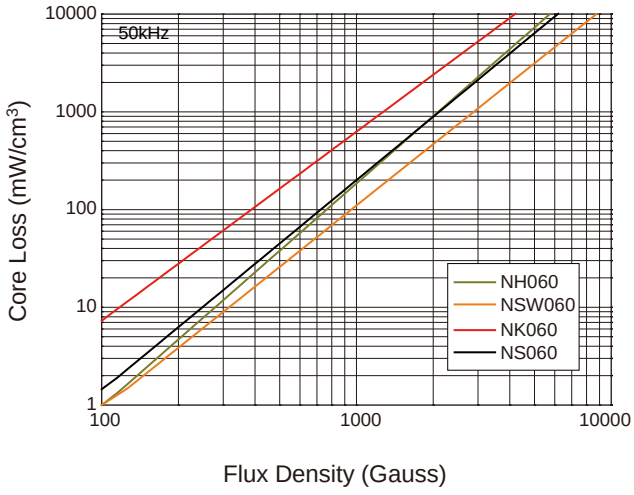
材料说明
Material Description

磁粉心材料特性表 Comparison Table of Powder Core Materials

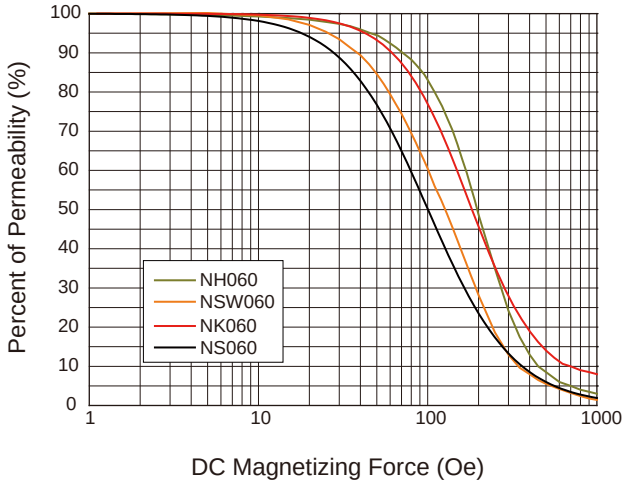
材料种类 Material Type	磁导率 Perm.	饱和磁通密度 Bs（Tesla）	居里温度(℃) Curie Temp.	工作温度范围(℃) Working Temp.	损耗 Pcv (kW/m3) 50kHz/100mT	叠加 DC Bias (%) (L100Oe/L0)
NH	26-125	1.5	500	-40~150	200	85
NHU	26-125	1.5	500	-40~150	140	90
NS	26-125	1.03	600	-40~150	220	46
NSW	26-90	1.03	600	-40~150	140	57
NSW-L	26-90	1.03	600	-40~150	110	57
NK	19-90	1.5	700	-40~150	500	72
NKH	26-90	1.5	500	-40~150	370	78
NHK	26-90	1.5	500	-40~150	280	81
NSH	26-90	1.15	500	-40~150	160	65
NHS	26-90	1.35	500	-40~150	180	76
NKS	26-90	1.15	600	-40~150	260	62

注：上表中的损耗和叠加以270060试环测试

Note: The testing ring of core loss and DC bias in the above table is the ring 270 with the perm.60.



磁导率60材料损耗对比
Comparison of Power Loss of Different Materials



磁导率与直流磁化场关系
Permeability vs DC Bias

材料说明
Material Description

NS铁硅铝磁粉心主要性能参数表 Key Characteristic Parameter Table of Sendust Powder Cores

Characteristic	Symbol	Unit	Condition	26	60	75	90	125
Effective Perm.	μ_e		100kHz	26±8%	60±8%	75±8%	90±8%	125±8%
DC Bias		%	$L_{2000e//}$ $L_{000e(26)}$ $L_{1000e//}$ $L_{000e(60-125)}$	52	48	33	26	16
Power Loss	Pcv	mW/cm^3	f=50kHz B=100mT	350	260	260	260	260
Core Density	d	g/cm^3		5.5	5.85	5.9	5.95	6.0

NH铁镍磁粉心主要性能参数表 Key Characteristic Parameter Table of Nickel Iron Alloy Powder Cores

Characteristic	Symbol	Unit	Condition	26	60	125
Effective Perm.	μ_e		100kHz	26±8%	60±8%	125±8%
DC Bias		%	$L_{2000e//}$ $L_{000e(26)}$ $L_{1000e//}$ $L_{000e(60-125)}$	83	83	40
Power Loss	Pcv	mW/cm^3	f=50kHz B=100mT	220	230	320
Core Density	d	g/cm^3		6.75	7.4	7.75

NK铁硅磁粉心主要性能参数表 Key Characteristic Parameter Table of Silicon Iron Alloy Powder Cores

Characteristic	Symbol	Unit	Condition	26	60	75	90
Effective Perm.	μ_e		100kHz	26±8%	60±8%	75±8%	90±8%
DC Bias		%	$L_{2000e//}$ $L_{000e(26)}$ $L_{1000e//}$ $L_{000e(060-090)}$	82	72	53	46
Power Loss	Pcv	mW/cm^3	f=50kHz B=100mT	800	600	600	600
Core Density	d	g/cm^3		6.55	6.85	6.95	7.1

NKS高磁通铁硅铝磁粉心主要性能参数表

Key Characteristic Parameter Table of High Flux Silicon Aluminum Iron Alloy powder cores

Characteristic	Symbol	Unit	Condition	26	60	90
Effective Perm.	μ_e		100kHz	26±8%	60±8%	90±8%
DC Bias		%	$L_{2000e//}$ $L_{000e(26)}$ $L_{1000e//}$ $L_{000e(60-125)}$	80	60	35
Power Loss	Pcv	mW/cm^3	f=50kHz B=100mT	230	260	300
Core Density	d	g/cm^3		5.9	6.3	6.6

材料说明
Material Description

NSW高磁通低损耗铁硅铝磁粉心主要性能参数表

Key Characteristic Parameter Table of High Flux Low Loss Silicon Aluminum Iron Alloy powder cores

Characteristic	Symbol	Unit	Condition	26	60
Effective Perm.	μ_e		100kHz	26±8%	60±8%
DC Bias		%	$L_{2000e//}$ $L_{00e(26)}$ $L_{1000e//}$ $L_{00e(60-60)}$	63	58
Power Loss	Pcv	mW/cm^3	f=50kHz B=100mT	160	140
Core Density	d	g/cm^3		5.65	6.0

NSWL高频铁硅铝磁粉心主要性能参数表

Key Characteristic Parameter Table of High Frequency Silicon Aluminum Iron Alloy Powder Cores

Characteristic	Symbol	Unit	Condition	26	60
Effective Perm.	μ_e		100kHz	26±8%	60±8%
DC Bias		%	$L_{2000e//}$ $L_{00e(26)}$ $L_{1000e//}$ $L_{00e(60-60)}$	63	58
Power Loss	Pcv	mW/cm^3	f=50kHz B=100mT	150	120
Core Density	d	g/cm^3		5.65	6.0

NSH复合磁粉心主要性能参数表

Key Characteristic Parameter Table of NSH Compound Powder Cores

Characteristic	Symbol	Unit	Condition	26	60	90
Effective Perm.	μ_e		100kHz	26±8%	60±8%	90±8%
DC Bias		%	$L_{2000e//}$ $L_{00e(26)}$ $L_{1000e//}$ $L_{00e(60-060)}$	75	65	43
Power Loss	Pcv	mW/cm^3	f=50kHz B=100mT	190	170	170
Core Density	d	g/cm^3		5.95	6.40	6.65

NHU铁镍超磁通磁粉心主要性能参数表

Key Characteristic Parameter Table of Ultra Flux Powder Cores

Characteristic	Symbol	Unit	Condition	60	125
Effective Perm.	μ_e		100kHz	60±8%	125±8%
DC Bias		%	$L_{2000e//}$ $L_{00e(26)}$ $L_{1000e//}$ $L_{00e(60-60)}$	90	45
Power Loss	Pcv	mW/cm^3	f=50kHz B=100mT	160	220
Core Density	d	g/cm^3		7.42	7.77

材料说明
Material Description

NHS复合磁粉心主要性能参数表

Key Characteristic Parameter Table of NHS Compound Powder Cores

Characteristic	Symbol	Unit	Condition	26	60	90
Effective Perm.	μ_e		100kHz	26±8%	60±8%	90±8%
DC Bias		%	$L_{2000e//}$ $L_{00e(26)}$ $L_{1000e//}$ $L_{00e(60-060)}$	79	76	55
Power Loss	Pcv	mW/cm^3	f=50kHz B=100mT	230	200	200
Core Density	d	g/cm^3		6.40	6.98	7.14

NKH复合磁粉心主要性能参数表

Key Characteristic Parameter Table of NKH Compound Powder Cores

Characteristic	Symbol	Unit	Condition	26	60	90
Effective Perm.	μ_e		100kHz	26±8%	60±8%	90±8%
DC Bias		%	$L_{2000e//}$ $L_{00e(26)}$ $L_{1000e//}$ $L_{00e(60-060)}$	78	78	55
Power Loss	Pcv	mW/cm^3	f=50kHz B=100mT	550	430	430
Core Density	d	g/cm^3		6.60	7.00	7.20

NHK复合磁粉心主要性能参数表

Key Characteristic Parameter Table of NHK Compound Powder Cores

Characteristic	Symbol	Unit	Condition	26	60	90
Effective Perm.	μ_e		100kHz	26±8%	60±8%	90±8%
DC Bias		%	$L_{2000e//}$ $L_{00e(26)}$ $L_{1000e//}$ $L_{00e(60-060)}$	85	81	55
Power Loss	Pcv	mW/cm^3	f=50kHz B=100mT	410	340	340
Core Density	d	g/cm^3		6.68	7.20	7.35

环型磁粉心表面均有绝缘涂层，不同颜色代表不同的材质，具备优异的介电性能。

The Ring-cores are all coated by different colour insulating epoxy which indicates different core material and have excellent dielectric properties.

材料/Material	颜色/Color
NS	黑色/Black
NK	棕色/Brown
NH	卡其色/Khaki
NSW	天蓝色/Sky Blue
NSWL	天蓝色/Sky Blue
NKS	天蓝色/Sky Blue

材料/Material	颜色/Color
NSH	天蓝色/Sky Blue
NHU	卡其色/Khaki
NHS	卡其色/Khaki
NKH	棕色/Brown
NHK	卡其色/Khaki