桐乡·重庆耀润

# 磁粉目录

# YR28

材料：YR28

特点：主要应用于中频段(小于 200kHz)
低磁芯损耗，高饱和磁通密度
损耗最低的温度点约在 100℃

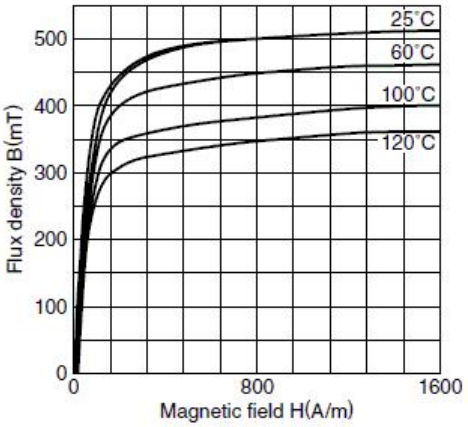
Material：YR28

Features：Mostly used at middle frequency(less than 200kHz)

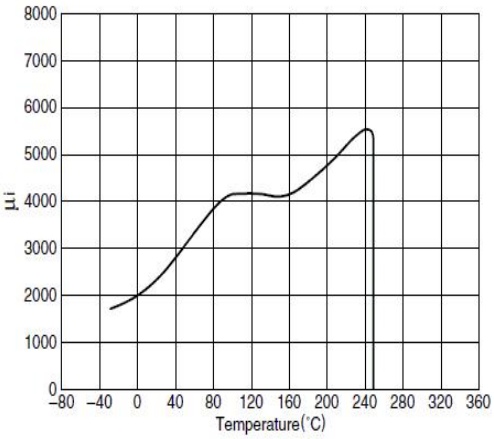
Low core loss and high saturation magnetic flux density

The temperature point of the lowest core loss at 100℃

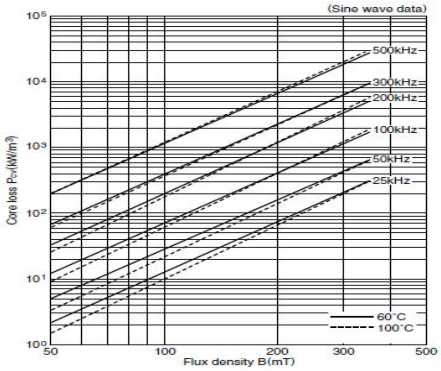
| 材质 Material | | | | | YR28 |
|---|---|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | | | 2300±25% |
| 振幅磁导率 Amplitude permeability | $\mu_a$ | | | | 3000min |
| 功率损耗* Core loss | Pcv | kW/m$^3$ | 25kHz 200mT 正弦波 | 25℃ | 120 |
| | | | | 60℃ | 80 |
| | | | | 100℃ | 70 |
| | | | | 120℃ | 85 |
| | | | 100kHz 200mT 正弦波 | 25℃ | 600 |
| | | | | 60℃ | 450 |
| | | | | 100℃ | 410 |
| | | | | 120℃ | 500 |
| 饱和磁通密度* Saturation magnetic flux density | Bs | mT | H=1194 A/m | 25℃ | 510 |
| | | | | 60℃ | 450 |
| | | | | 100℃ | 390 |
| | | | | 120℃ | 350 |
| 剩余磁通密度* Remanent flux density | Br | mT | | 25℃ | 95 |
| | | | | 60℃ | 65 |
| | | | | 100℃ | 55 |
| | | | | 120℃ | 50 |
| 矫顽力* Coercive force | Hc | A/m | | 25℃ | 14.3 |
| | | | | 60℃ | 10.3 |
| | | | | 100℃ | 8.8 |
| | | | | 120℃ | 8 |
| 居里温度 Curie temperature | Tc | ℃ | | | ＞215 |
| 密度* Density | db | g/cm$^3$ | | | 4.8 |
| 电阻率* Electrical resistivity | ρ | Ω·m | | | 6.5 |




B-H




μ i-T

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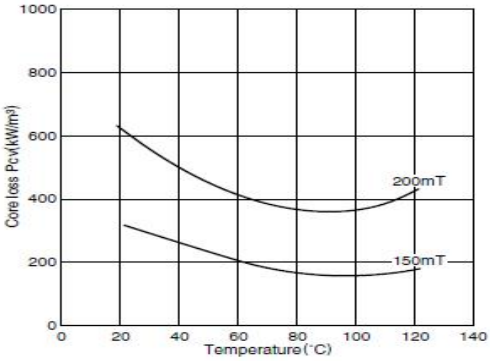



Pcv-T

# YR48

材料：YR48

特点：主要应用于中频段(小于 300kHz)
低磁芯损耗，高饱和磁通密度
损耗最低的温度点约在 100℃

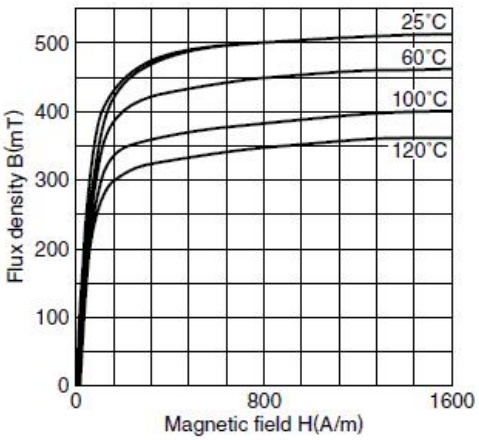
Material：YR48

Features：Mostly used at middle frequency(less than 300kHz)

Low core loss and high saturation magnetic flux density

The temperature point of the lowest core loss at 100℃

| 材质 Material | | | | | YR48 |
|---|---|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | | | 2400±25% |
| 振幅磁导率 Amplitude permeability | $\mu_a$ | | | | 3000min |
| 功率损耗* Core loss | Pcv | kW/m$^3$ | 25kHz 200mT 正弦波 | 25℃ | |
| | | | | 60℃ | |
| | | | | 100℃ | |
| | | | | 120℃ | |
| | | | 100kHz 200mT 正弦波 | 25℃ | 600 |
| | | | | 60℃ | 400 |
| | | | | 100℃ | 300 |
| | | | | 120℃ | 380 |
| 饱和磁通密度* Saturation magnetic flux density | Bs | mT | H=1194A/m | 25℃ | 510 |
| | | | | 60℃ | 450 |
| | | | | 100℃ | 390 |
| | | | | 120℃ | 350 |
| 剩余磁通密度* Remanent flux density | Br | mT | | 25℃ | 110 |
| | | | | 60℃ | 70 |
| | | | | 100℃ | 60 |
| | | | | 120℃ | 55 |
| 矫顽力* Coercive force | Hc | A/m | | 25℃ | 13 |
| | | | | 60℃ | 9 |
| | | | | 100℃ | 6.5 |
| | | | | 120℃ | 6 |
| 居里温度 Curie temperature | Tc | ℃ | | | ＞215 |
| 密度* Density | db | g/cm$^3$ | | | 4.8 |
| 电阻率* Electrical resistivity | ρ | Ω·m | | | 6.5 |

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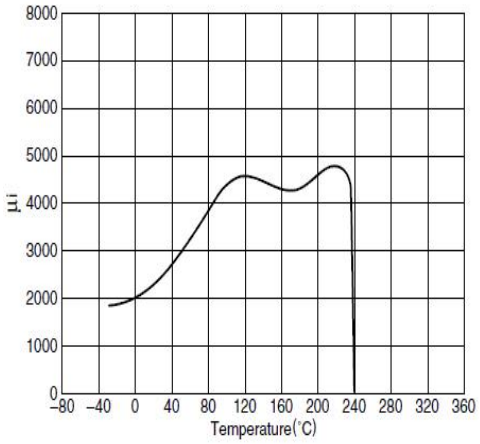
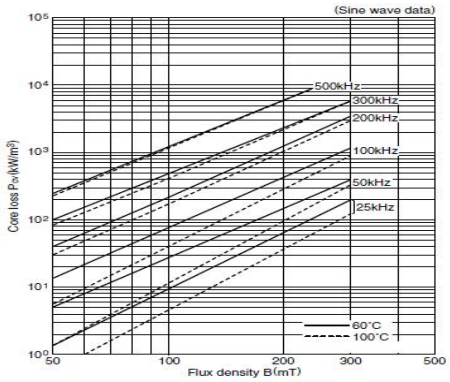



μ i-T

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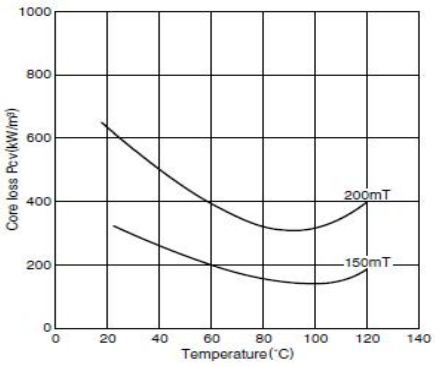



Pcv-T

# YR48D

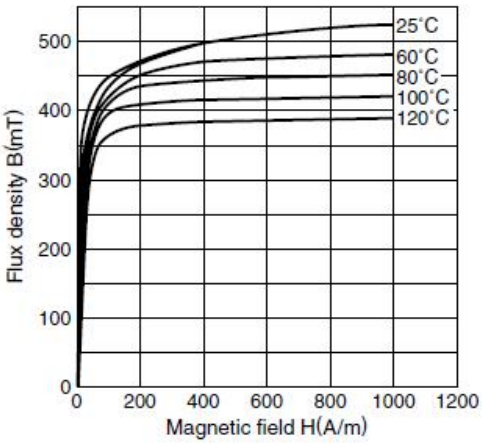
材料：YR48D

特点：主要应用于中频段(小于 300kHz)
低磁芯损耗，高饱和磁通密度
损耗最低的温度点约在 100℃

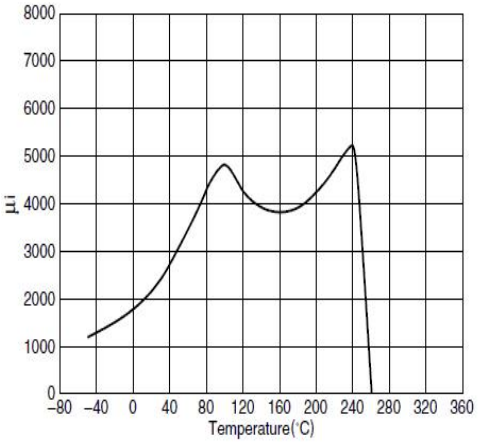
Material：YR48D

Features：Mostly used at middle frequency(less than 300kHz)
Low core loss and high saturation magnetic flux density
The temperature point of the lowest core loss at 100℃

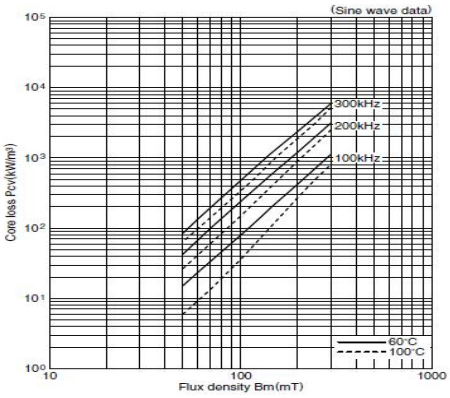
| 材质 Material | | | | | YR48D |
|---|---|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | | | 2500±25% |
| 振幅磁导率 Amplitude permeability | $\mu_a$ | | | | |
| 功率损耗* Core loss | Pcv | kW/m$^3$ | 25kHz 200mT 正弦波 | 25℃ | |
| | | | | 60℃ | |
| | | | | 100℃ | |
| | | | | 120℃ | |
| | | | 100kHz 200mT 正弦波 | 25℃ | 600 |
| | | | | 60℃ | 400 |
| | | | | 100℃ | 250 |
| | | | | 120℃ | 360 |
| 饱和磁通密度* Saturation magnetic flux density | Bs | mT | H=1194 A/m | 25℃ | 530 |
| | | | | 60℃ | 480 |
| | | | | 100℃ | 420 |
| | | | | 120℃ | 390 |
| 剩余磁通密度* Remanent flux density | Br | mT | | 25℃ | 180 |
| | | | | 60℃ | 100 |
| | | | | 100℃ | 60 |
| | | | | 120℃ | 60 |
| 矫顽力* Coercive force | Hc | A/m | | 25℃ | 13 |
| | | | | 60℃ | 9 |
| | | | | 100℃ | 6 |
| | | | | 120℃ | 7 |
| 居里温度 Curie temperature | Tc | ℃ | | | ＞230 |
| 密度* Density | db | g/cm$^3$ | | | 4.9 |
| 电阻率* Electrical resistivity | ρ | Ω·m | | | 4 |




B-H




μ i-T

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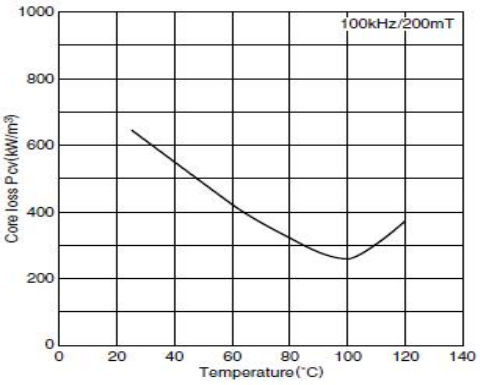


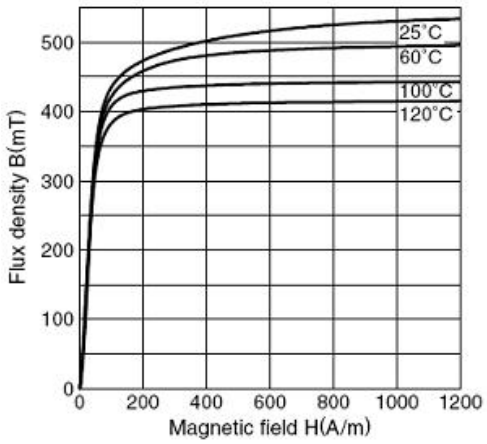

Pcv-T

# YR48B

材料：YR48B
特点：高饱和磁通密度
较高的居里温度
较低的功率损耗

Material：YR48B
Features：High saturation magnetic flux
High curie temperature
Low core loss

| 材质 Material | | | | | YR48B |
|---|---|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | | | 2200±25% |
| 振幅磁导率 Amplitude permeability | $\mu_a$ | | | | |
| 功率损耗* Core loss | Pcv | kW/m$^3$ | 25kHz 200mT 正弦波 | 25℃ | |
| | | | | 60℃ | |
| | | | | 100℃ | |
| | | | | 120℃ | |
| | | | 100kHz 200mT 正弦波 | 25℃ | 680 |
| | | | | 60℃ | 470 |
| | | | | 100℃ | 320 |
| | | | | 120℃ | 460 |
| 饱和磁通密度* Saturation magnetic flux density | Bs | mT | H=1194 A/m | 25℃ | 540 |
| | | | | 60℃ | 500 |
| | | | | 100℃ | 450 |
| | | | | 120℃ | 420 |
| 剩余磁通密度* Remanent flux density | Br | mT | | 25℃ | 170 |
| | | | | 60℃ | 95 |
| | | | | 100℃ | 60 |
| | | | | 120℃ | 65 |
| 矫顽力* Coercive force | Hc | A/m | | 25℃ | 13 |
| | | | | 60℃ | 9 |
| | | | | 100℃ | 6.5 |
| | | | | 120℃ | 7 |
| 居里温度 Curie temperature | Tc | ℃ | | | ＞250 |
| 密度* Density | db | g/cm$^3$ | | | 4.9 |
| 电阻率* Electrical resistivity | ρ | Ω·m | | | 4 |

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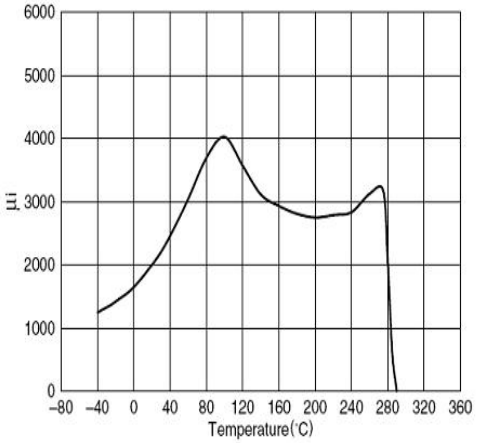
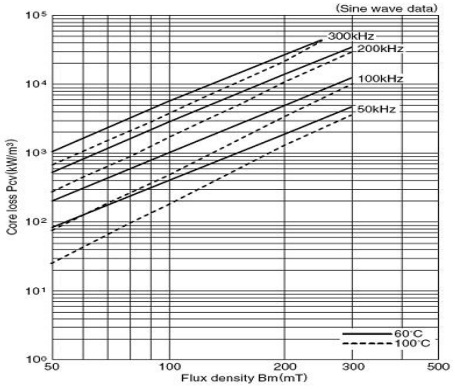
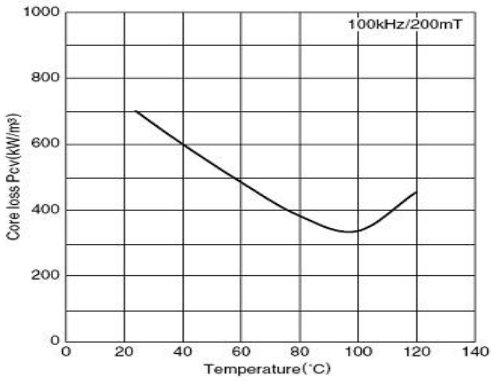



μ i-T




Pcv-Bm




Pcv-T

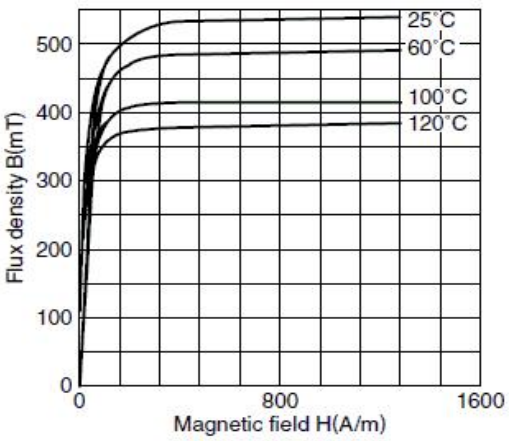
# YR98

材料：YR98
特点：宽温度低损耗
高饱和磁通密度

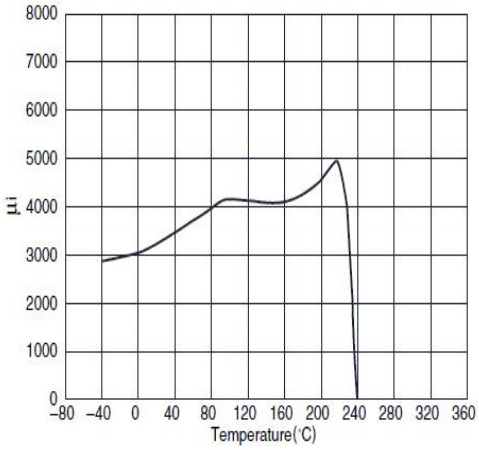
Material：YR98
Features：Low core loss in a wide temperature ranges
High saturation magnetic flux density

| 材质 Material | | | | | YR98 |
|---|---|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | | | 3300±25% |
| 振幅磁导率 Amplitude permeability | $\mu_a$ | | | | |
| 功率损耗* Core loss | Pcv | kW/m$^3$ | 25kHz 200mT 正弦波 | 25℃ | |
| | | | | 60℃ | |
| | | | | 100℃ | |
| | | | | 120℃ | |
| | | | 100kHz 200mT 正弦波 | 25℃ | 350 |
| | | | | 60℃ | |
| | | | | 100℃ | 290 |
| | | | | 120℃ | 350 |
| 饱和磁通密度* Saturation magnetic flux density | Bs | mT | H=1194 A/m | 25℃ | 530 |
| | | | | 60℃ | 480 |
| | | | | 100℃ | 410 |
| | | | | 120℃ | 380 |
| 剩余磁通密度* Remanent flux density | Br | mT | | 25℃ | 85 |
| | | | | 60℃ | 70 |
| | | | | 100℃ | 60 |
| | | | | 120℃ | 55 |
| 矫顽力* Coercive force | Hc | A/m | | 25℃ | 9.5 |
| | | | | 60℃ | 7.5 |
| | | | | 100℃ | 6.5 |
| | | | | 120℃ | 6 |
| 居里温度 Curie temperature | Tc | ℃ | | | ＞215 |
| 密度* Density | db | g/cm$^3$ | | | 4.9 |
| 电阻率* Electrical resistivity | ρ | Ω·m | | | 6 |

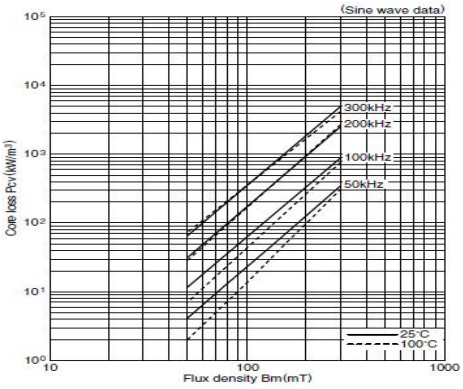
* 平均值 Average value；
** 500kHz，50mT



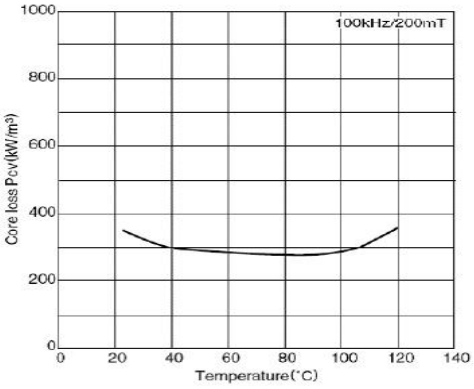

B-H




μ i-T




Pcv-Bm




Pcv-T

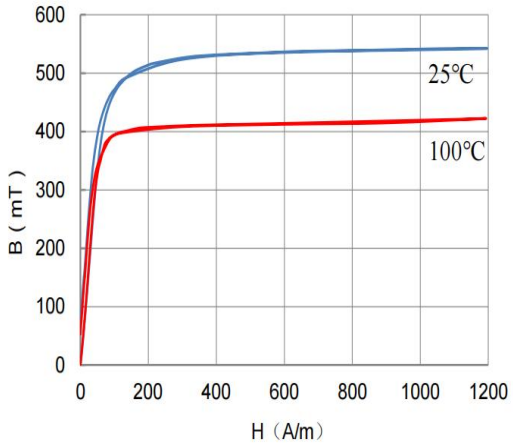
# YR98B

材料：YR98B
特点：宽温宽频低损耗材料

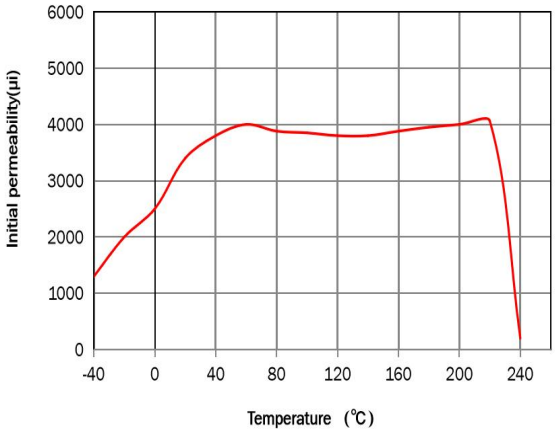
Material：YR98B
Features： Wide Temp& Wide Freq low loss

| 材质 Material | | | | | YR98B |
|---|---|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | | | 3500±25% |
| 振幅磁导率 Amplitude permeability | $\mu_a$ | | | | |
| 功率损耗* Core loss | Pcv | kW/m$^3$ | 100kHz 200mT 正弦波 | 25℃ | 330 |
| | | | | 80℃ | 260 |
| | | | | 100℃ | 290 |
| | | | | 120℃ | 340 |
| | | | | 140℃ | 390 |
| | | | 200kHz 100mT 正弦波 | 25℃ | 180 |
| | | | | 80℃ | 140 |
| | | | | 100℃ | 150 |
| | | | | 120℃ | 180 |
| | | | | 140℃ | 210 |
| | | | 200kHz 150mT 正弦波 | 25℃ | 450 |
| | | | | 80℃ | 390 |
| | | | | 100℃ | 420 |
| | | | | 120℃ | 500 |
| | | | | 140℃ | 600 |
| 饱和磁通密度* Saturation magnetic flux density | Bs | mT | H=1194 A/m | 25℃ | 530 |
| | | | | 100℃ | 420 |
| 剩余磁通密度* Remanent flux density | Br | mT | | 25℃ | 80 |
| | | | | 100℃ | 60 |
| 矫顽力* Coercive force | Hc | A/m | | 25℃ | 10 |
| | | | | 100℃ | 8 |
| 居里温度 Curie temperature | Tc | ℃ | | | ＞220 |
| 密度* Density | db | g/cm$^3$ | | | 4.9 |
| 电阻率* Electrical resistivity | ρ | Ω·m | | | 7 |

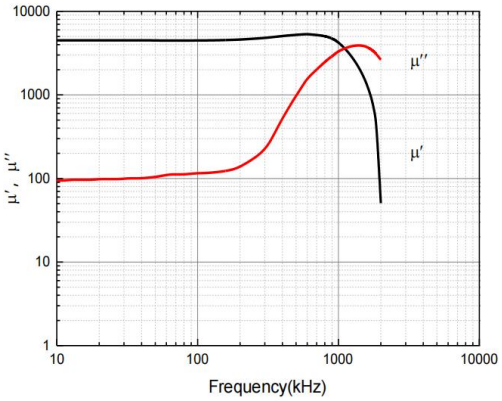
＊ 平均值 Average value；



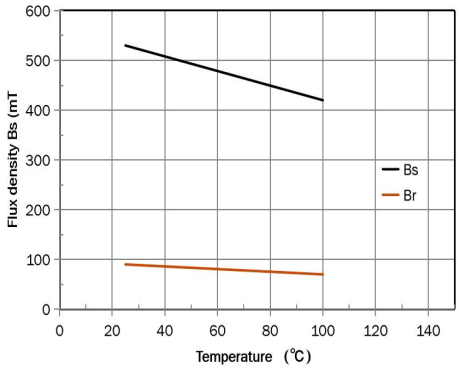

B-H



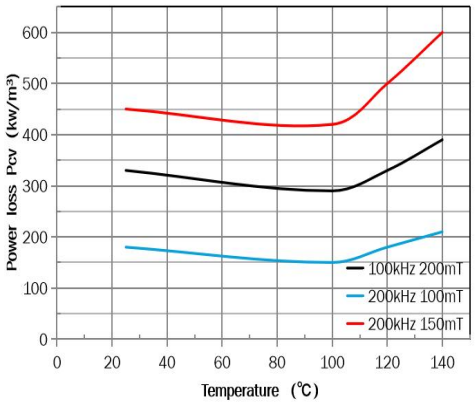

μ i-T




μ -F




Bs-T




Pcv-T

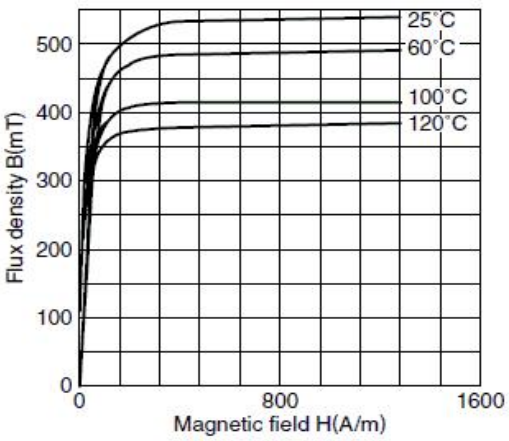
# YR98E

材料：YR98E
特点：宽温宽频低损耗材料

Material：YR98E
Features： Wide Temp& Wide Freq low loss

| 材质 Material | | | | | YR98E |
|---|---|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | | | 3500±25% |
| 振幅磁导率 Amplitude permeability | $\mu_a$ | | | | |
| 功率损耗* Core loss | Pcv | kW/m$^3$ | 25kHz 200mT 正弦波 | 25℃ | |
| | | | | 60℃ | |
| | | | | 100℃ | |
| | | | | 120℃ | |
| | | | 100kHz 200mT 正弦波 | 25℃ | 260/260** |
| | | | | 60℃ | |
| | | | | 100℃ | 270/290** |
| | | | | 120℃ | 320 |
| 饱和磁通密度* Saturation magnetic flux density | Bs | mT | H=1194 A/m | 25℃ | 530 |
| | | | | 60℃ | |
| | | | | 100℃ | 420 |
| | | | | 120℃ | |
| 剩余磁通密度* Remanent flux density | Br | mT | | 25℃ | 90 |
| | | | | 60℃ | |
| | | | | 100℃ | 70 |
| | | | | 120℃ | |
| 矫顽力* Coercive force | Hc | A/m | | 25℃ | 10 |
| | | | | 60℃ | |
| | | | | 100℃ | 8 |
| | | | | 120℃ | |
| 居里温度 Curie temperature | Tc | ℃ | | | ＞215 |
| 密度* Density | db | g/cm$^3$ | | | 4.9 |
| 电阻率* Electrical resistivity | ρ | Ω·m | | | 6 |

* 平均值 Average value；
** 300kHz，100mT

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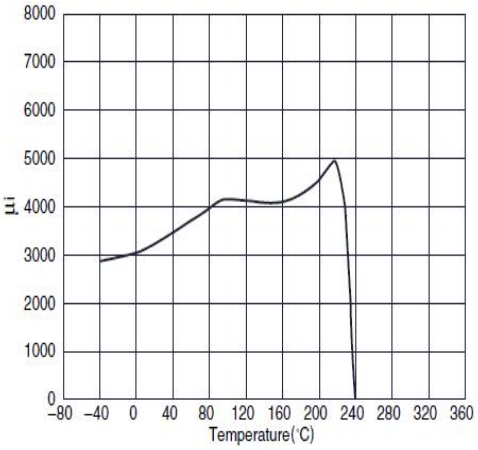
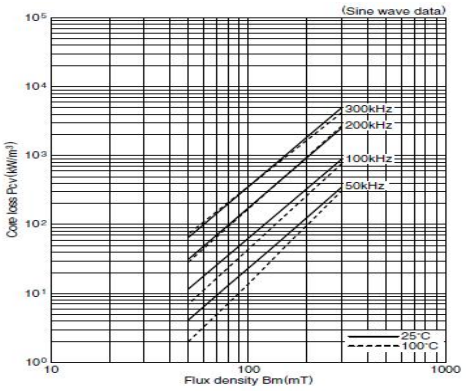
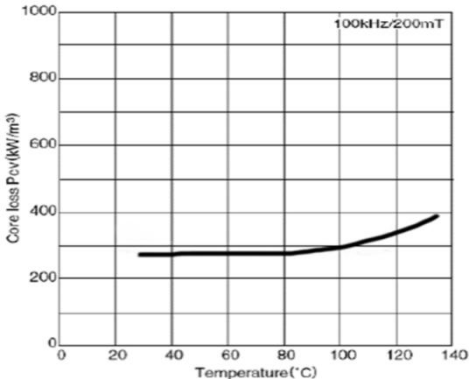



μ i-T




Pcv-Bm




Pcv-T

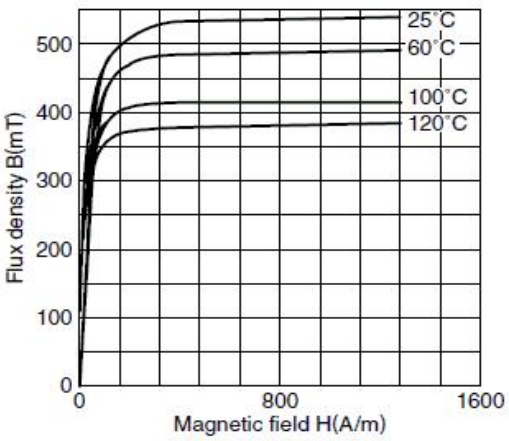
# YR98G

材料：YR98G
特点：宽温高饱和磁通密度材料

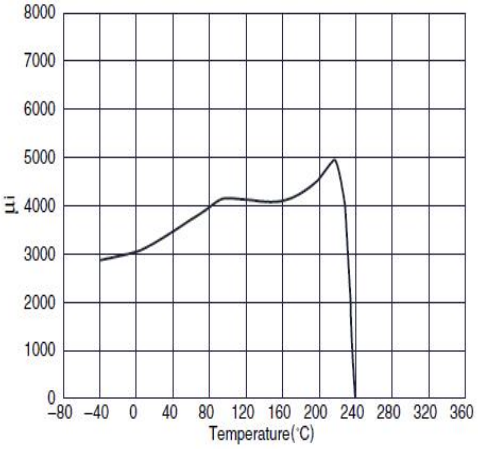
Material：YR98G
Features：Wide Temp & High Bs

| 材质 Material | | | | | YR98G |
|---|---|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | | | 3300±25% |
| 振幅磁导率 Amplitude permeability | $\mu_a$ | | | | |
| 功率损耗* Core loss | Pcv | kW/m$^3$ | 25kHz 200mT 正弦波 | 25℃ | |
| | | | | 80℃ | |
| | | | | 100℃ | |
| | | | | 120℃ | |
| | | | 100kHz 200mT 正弦波 | 25℃ | 380 |
| | | | | 80℃ | 360 |
| | | | | 100℃ | 370 |
| | | | | 120℃ | 400 |
| 饱和磁通密度* Saturation magnetic flux density | Bs | mT | H=1194 A/m | 25℃ | 540 |
| | | | | 60℃ | |
| | | | | 100℃ | 450 |
| | | | | 120℃ | |
| 剩余磁通密度* Remanent flux density | Br | mT | | 25℃ | 90 |
| | | | | 60℃ | |
| | | | | 100℃ | 60 |
| | | | | 120℃ | |
| 矫顽力* Coercive force | Hc | A/m | | 25℃ | 10 |
| | | | | 60℃ | |
| | | | | 100℃ | 6.5 |
| | | | | 120℃ | |
| 居里温度 Curie temperature | Tc | ℃ | | | ＞230 |
| 密度* Density | db | g/cm$^3$ | | | 4.85 |
| 电阻率* Electrical resistivity | ρ | Ω·m | | | 6 |

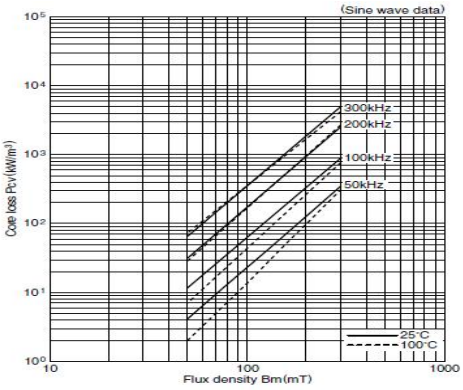
＊ 平均值 Average value；



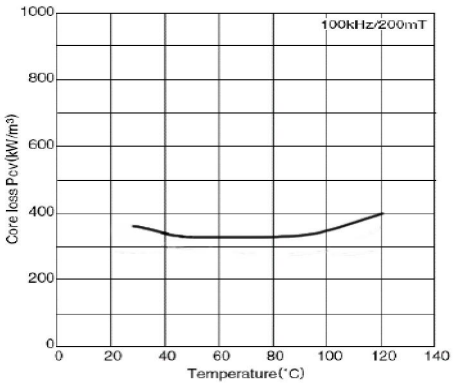

B-H




μ i-T




Pcv-Bm




Pcv-T

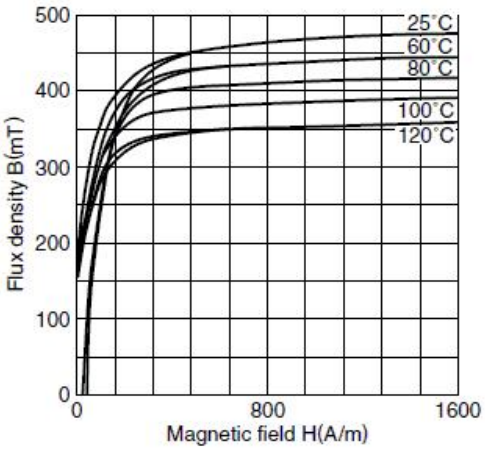
# YR58

材料：YR58
特点：主要应用于高频段
(500kHz 到 1MHz)
损耗最低的温度点约在 100℃

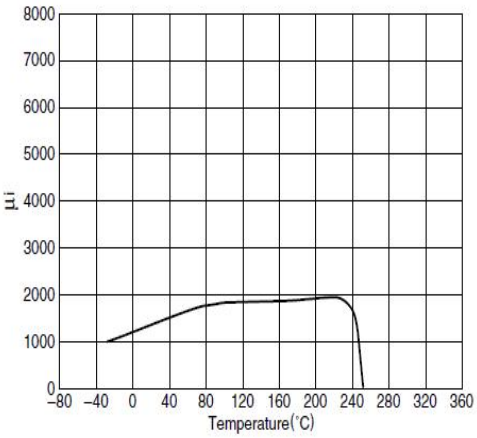
Material：YR58
Features：Mostly used at high frequency(from 500kHz to 1MHz )
The temperature point of the lowest core loss at 100℃

| 材质 Material | | | | | YR58 |
|---|---|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | | | 1400±25% |
| 振幅磁导率 Amplitude permeability | $\mu_a$ | | | | |
| 功率损耗* Core loss | Pcv | kW/m$^3$ | 25kHz 200mT 正弦波 | 25℃ | |
| | | | | 60℃ | |
| | | | | 100℃ | |
| | | | | 120℃ | |
| | | | 100kHz 200mT 正弦波 | 25℃ | 130** |
| | | | | 60℃ | 80** |
| | | | | 100℃ | 80** |
| | | | | 120℃ | 110** |
| 饱和磁通密度* Saturation magnetic flux density | Bs | mT | H=1194 A/m | 25℃ | 470 |
| | | | | 60℃ | 440 |
| | | | | 100℃ | 380 |
| | | | | 120℃ | 350 |
| 剩余磁通密度* Remanent flux density | Br | mT | | 25℃ | 140 |
| | | | | 60℃ | 110 |
| | | | | 100℃ | 98 |
| | | | | 120℃ | 100 |
| 矫顽力* Coercive force | Hc | A/m | | 25℃ | 36.5 |
| | | | | 60℃ | 31 |
| | | | | 100℃ | 27.2 |
| | | | | 120℃ | 26 |
| 居里温度 Curie temperature | Tc | ℃ | | | ＞240 |
| 密度* Density | db | g/cm$^3$ | | | 4.8 |
| 电阻率* Electrical resistivity | ρ | Ω·m | | | 30 |

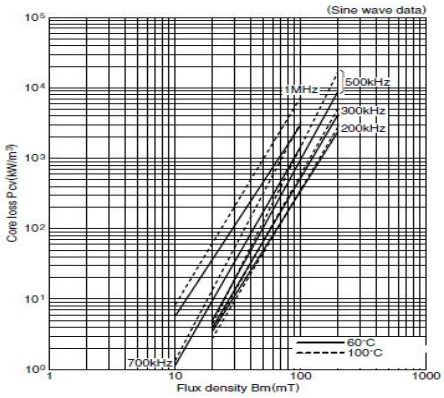
* 平均值 Average value；
** 500kHz，50mT



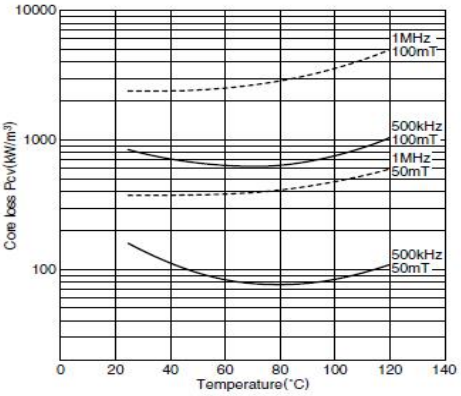

B-H




μ i-T




Pcv-Bm



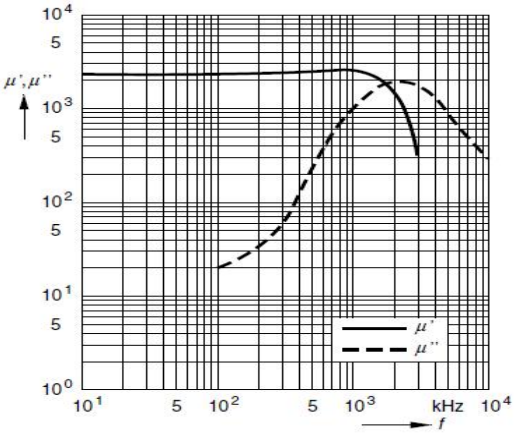

Pcv-T

# YR48Q

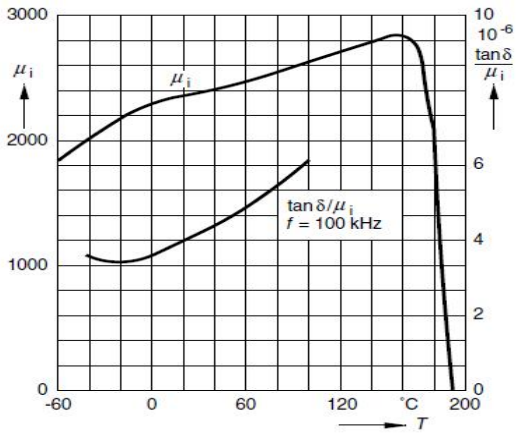
材料：YR48Q
特点：低比损耗因子
低磁滞损耗系数

Material：YR48Q
Features：Low relative loss factor
Low hysteresis material constant

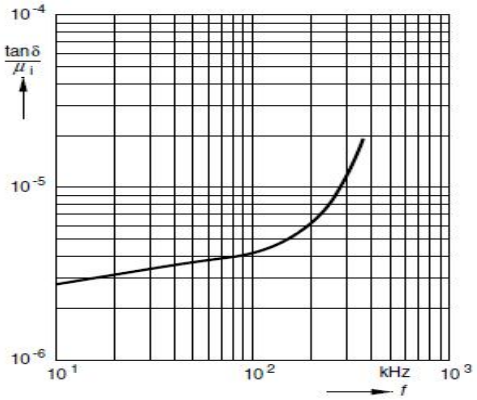
| 材质 Material | | | YR48Q |
|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | 2300±25% |
| 比损耗系数 Relative loss factor | $\tan\delta/\mu_i$ | $\times10^{-6}$ | ≤4（10kHz）<br>≤6（100kHz） |
| 饱和磁通密度 Saturation magnetic flux density (H=1194A/m) | Bs | mT | 420（25℃）<br>310（100℃） |
| 剩余磁通密度 Remanent flux density | Br | mT | |
| 矫顽力 Coercive force | Hc | A/m | |
| 比温度系数 Relative temperature coeffcient (20～60℃) | $\alpha_{\mu r}$ | $\times10^{-6}$/℃ | 0.3～1.3 |
| 比磁滞损耗系数 Hysteresis material constant 25℃,10kHz,1.5～3mT | $\eta_B$ | $\times10^{-6}$/mT | ＜0.4 |
| 居里温度 Curie temperature | Tc | ℃ | ＞170 |
| 电阻率 Electrical resistivity | ρ | Ω·m | |
| 密度 Density | d | $g/cm^3$ | |




μ -f




tan δ / μ i-T



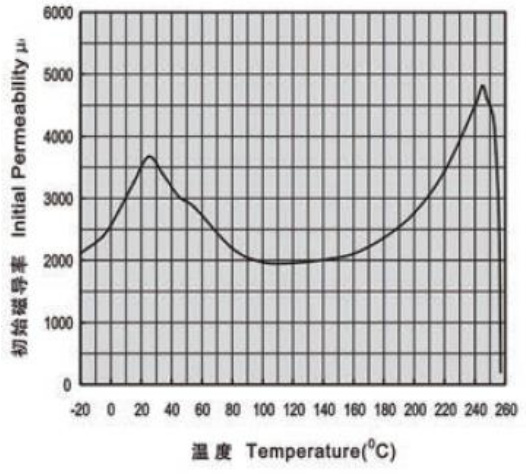

tan δ / μ i-f

# YR38Q

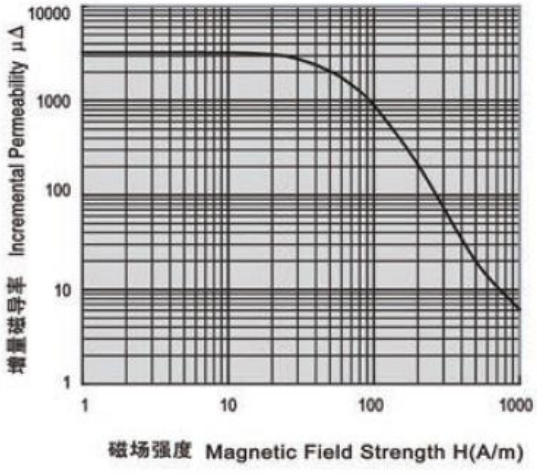
材料：YR38Q
特点：高磁导率(约 3800)
高饱和磁通密度
较高的居里温度

Material：YR38Q
Features：High initial permeability(about 3800)
High saturation magnetic flux density
High curie temperature

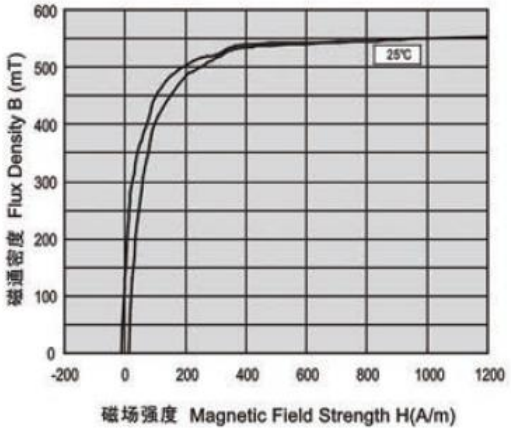
| 材质 Material | | | YR38Q |
|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | 3800±25% |
| 比损耗系数 Relative loss factor | $\tan\delta/\mu_i$ | $\times10^{-6}$ | ≈1（10kHz）<br>≈2（100kHz） |
| 饱和磁通密度 Saturation magnetic flux density (H=1194A/m) | Bs | mT | 550（25℃）<br>435（100℃） |
| 剩余磁通密度 Remanent flux density | Br | mT | |
| 矫顽力 Coercive force | Hc | A/m | 12 |
| 比温度系数 Relative temperature coeffcient (20～60℃) | $\alpha_{\mu r}$ | $\times10^{-6}$/℃ | ≈4.4（5～25℃）<br>≈－2.2（25～55℃） |
| 比磁滞损耗系数 Hysteresis material constant 25℃,10kHz,1.5～3mT | $\eta_B$ | $\times10^{-6}$/mT | ＜0.3 |
| 居里温度 Curie temperature | Tc | ℃ | ＞255 |
| 电阻率 Electrical resistivity | ρ | Ω·m | |
| 密度 Density | d | $g/cm^3$ | |



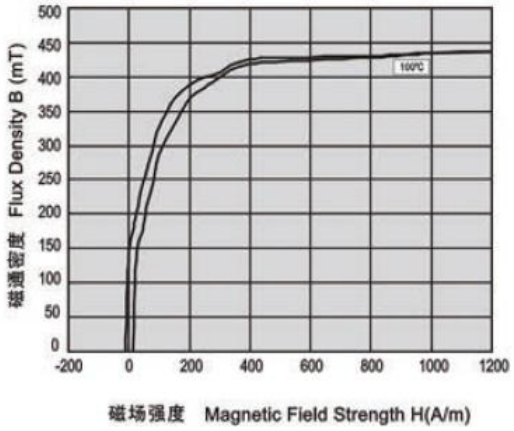

μ-T



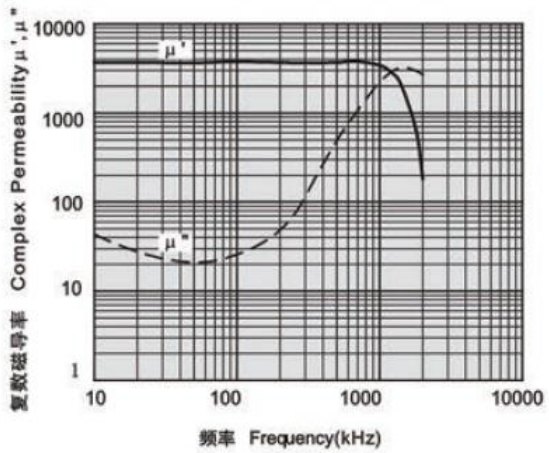

μ Δ-H



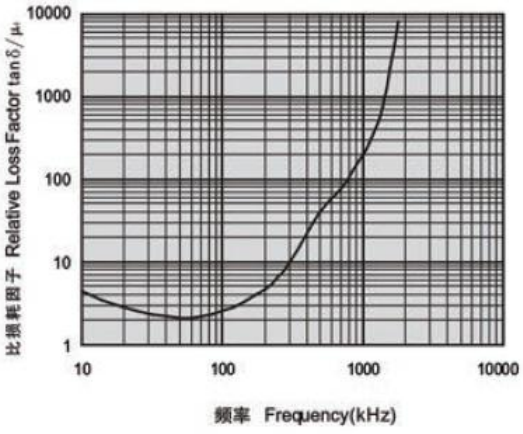

B-H (25℃)




B-H(100℃)




μ-f



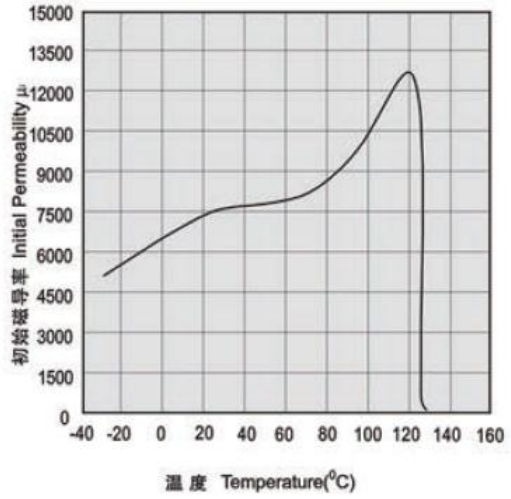

tan δ / μ i-f

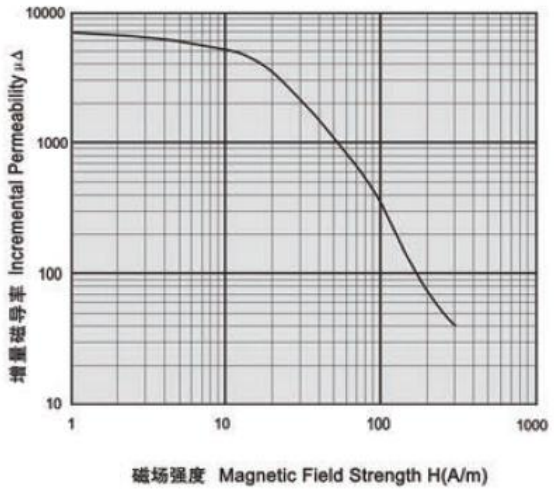
# YR46

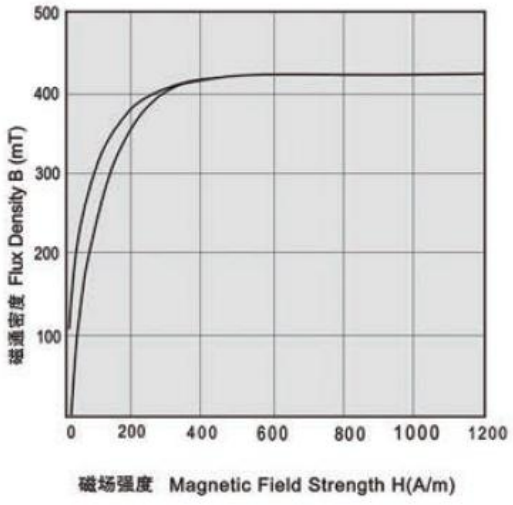
材料：YR46
特点：高磁导率(约 7000)
低比损耗因子
频率特性优良

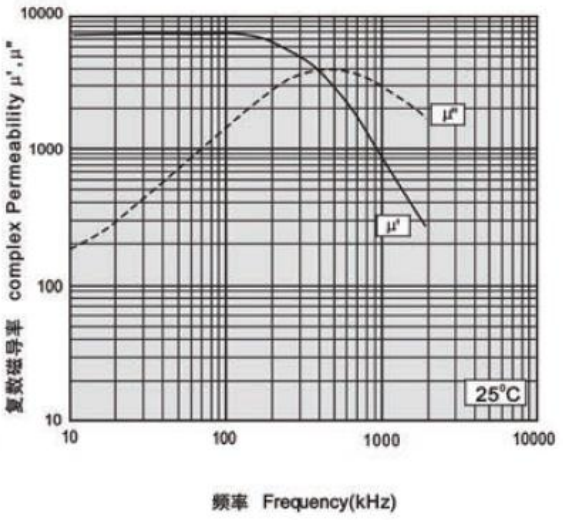
Material：YR46
Features：High initial permeability(about 7000)
Low relative loss factor
The initial permeability vs frequency Characteristis is good

| 材质<br>Material | | | YR46 |
|---|---|---|---|
| 初始磁导率<br>Initial permeability | $\mu_i$ | | 7000±25% |
| 比损耗系数<br>Relative loss factor | $\tan\delta/\mu_i$ | $\times10^{-6}$ | ＜30<br>（100kHz） |
| 饱和磁通密度 Saturation magnetic flux density<br>(H=1194A/m) | Bs | mT | 420 |
| 剩余磁通密度 Remanent flux density | Br | mT | 110 |
| 矫顽力<br>Coercive force | Hc | A/m | 7 |
| 比温度系数<br>Relative temperature coeffcient<br>(20～60℃) | $\alpha_{\mu r}$ | $\times10^{-6}$/℃ | －0.5～2.0 |
| 比磁滞损耗系数 Hysteresis material constant<br>25℃,10kHz,1.5～3mT | $\eta_B$ | $\times10^{-6}$/mT | ＜1.2 |
| 居里温度<br>Curie temperature | Tc | ℃ | ＞125 |
| 电阻率<br>Electrical resistivity | ρ | Ω·m | 0.2 |
| 密度<br>Density | d | $g/cm^3$ | 4.9 |


15000
13500
12000
10500
9000
7500
6000
4500
3000
1500
0
初始磁导率 Initial Permeability μi
-40 -20 0 20 40 60 80 100 120 140 160
温 度 Temperature(°C)


10000
1000
100
10
增量磁导率 Incremental Permeability μΔ
1 10 100 1000
磁场强度 Magnetic Field Strength H(A/m)


500
400
300
200
100
磁通密度 Flux Density B (mT)
0 200 400 600 800 1000 1200
磁场强度 Magnetic Field Strength H(A/m)

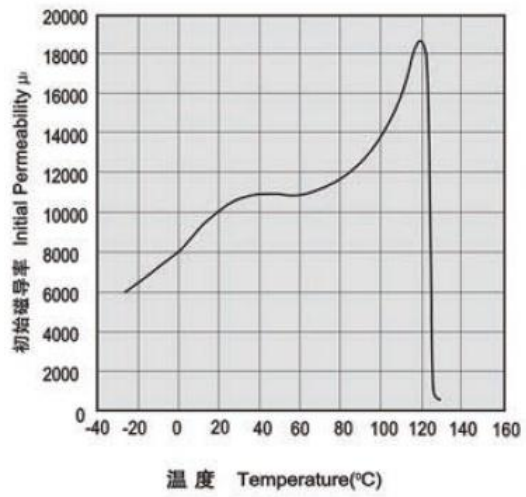

10000
1000
100
10
复数磁导率 complex Permeability μ', μ"
μ"
μ'
25°C
10 100 1000 10000
频率 Frequency(kHz)

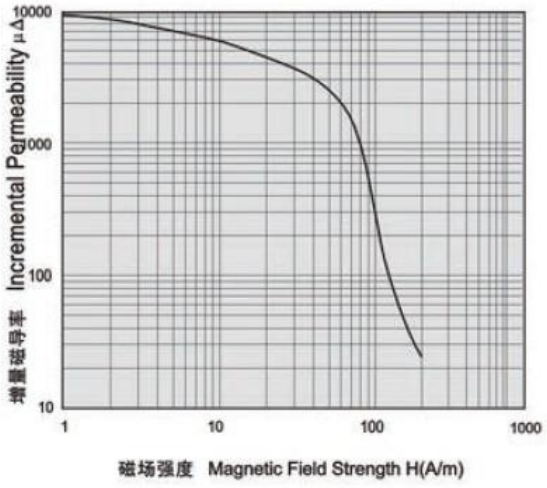
# YR56

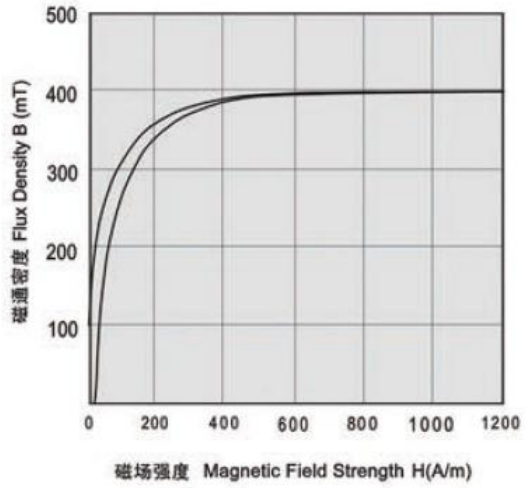
材料：YR56
特点：高磁导率(约 10000)
低比损耗因子
频率特性优良

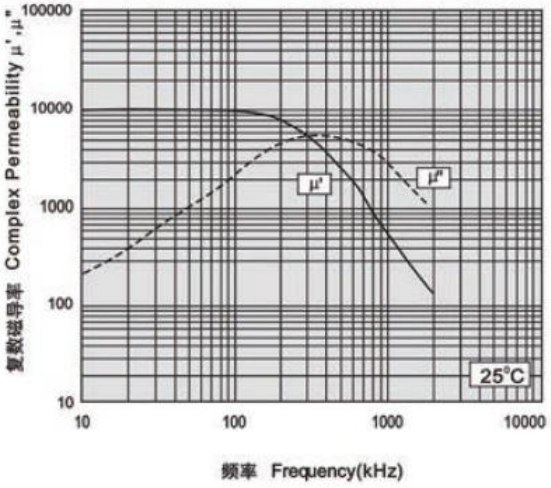
Material：YR56
Features：High initial permeability(about10000)
Low relative loss factor
The initial permeability vs frequency Characteristis is good

| 材质<br>Material | | | YR56 |
|---|---|---|---|
| 初始磁导率<br>Initial permeability | $\mu_i$ | | 10000±30% |
| 比损耗系数<br>Relative loss factor | $\tan\delta/\mu_i$ | $\times10^{-6}$ | ＜7.0（10kHz） |
| 饱和磁通密度 Saturation magnetic flux density<br>(H=1194A/m) | Bs | mT | 400 |
| 剩余磁通密度 Remanent flux density | Br | mT | 100 |
| 矫顽力<br>Coercive force | Hc | A/m | 6.5 |
| 比温度系数<br>Relative temperature coeffcient<br>(20～60℃) | $\alpha_{\mu r}$ | $\times10^{-6}$/℃ | －0.5～2.0 |
| 比磁滞损耗系数 Hysteresis material constant<br>25℃,10kHz,1.5～3mT | $\eta_B$ | $\times10^{-6}$/mT | ＜1.4 |
| 居里温度<br>Curie temperature | Tc | ℃ | ＞120 |
| 电阻率<br>Electrical resistivity | ρ | Ω·m | 0.15 |
| 密度<br>Density | d | $g/cm^3$ | 4.9 |


初始磁导率 Initial Permeability μi
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
-40 -20 0 20 40 60 80 100 120 140 160
温 度 Temperature(°C)


增量磁导率 Incremental Permeability μΔ
10000
1000
100
10
1 10 100 1000
磁场强度 Magnetic Field Strength H(A/m)


磁通密度 Flux Density B (mT)
500
400
300
200
100
0 200 400 600 800 1000 1200
磁场强度 Magnetic Field Strength H(A/m)

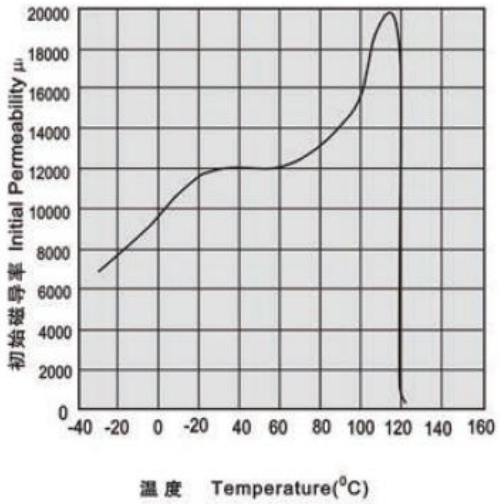

复数磁导率 Complex Permeability μ', μ"
100000
10000
1000
100
10
μ'
μ"
25°C
10 100 1000 10000
频率 Frequency(kHz)

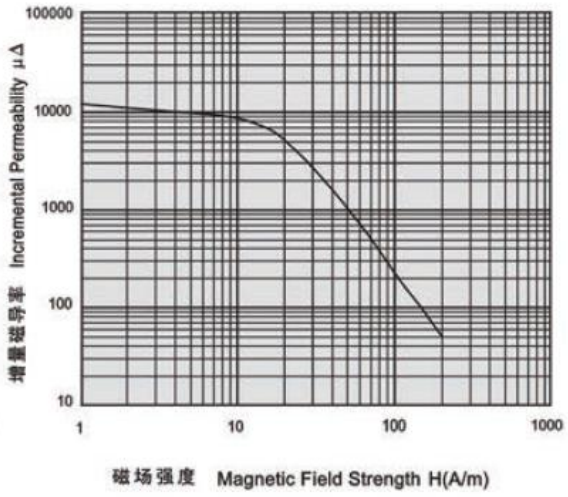
# YR66

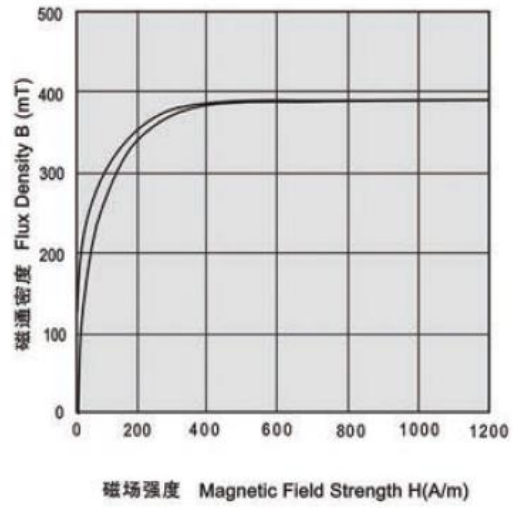
材料：YR66
特点：高磁导率(约 12000)

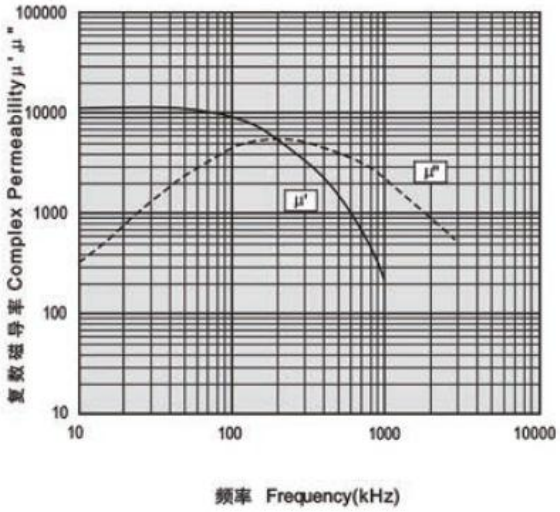
Material：YR66
Features：High initial permeability(about12000)

| 材质<br>Material | | | YR66 |
|---|---|---|---|
| 初始磁导率<br>Initial permeability | $\mu_i$ | | 12000±30% |
| 比损耗系数<br>Relative loss factor | $\tan\delta/\mu_i$ | $\times10^{-6}$ | ＜7.0（10kHz） |
| 饱和磁通密度 Saturation magnetic flux density<br>(H=1194A/m) | Bs | mT | 380 |
| 剩余磁通密度 Remanent flux density | Br | mT | 100 |
| 矫顽力<br>Coercive force | Hc | A/m | 6 |
| 比温度系数<br>Relative temperature coeffcient<br>(20～60℃) | $\alpha_{\mu r}$ | $\times10^{-6}$/℃ | －0.5～2.0 |
| 比磁滞损耗系数 Hysteresis material constant<br>25℃,10kHz,1.5～3mT | $\eta_B$ | $\times10^{-6}$/mT | ＜1.5 |
| 居里温度<br>Curie temperature | Tc | ℃ | ＞110 |
| 电阻率<br>Electrical resistivity | ρ | Ω·m | 0.15 |
| 密度<br>Density | d | $g/cm^3$ | 4.9 |


初始磁导率 Initial Permeability μi
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
-40 -20 0 -20 40 60 80 100 120 140 160
温度 Temperature(°C)


增量磁导率 Incremental Permeability μΔ
100000
10000
1000
100
10
1 10 100 1000
磁场强度 Magnetic Field Strength H(A/m)


磁通密度 Flux Density B (mT)
500
400
300
200
100
0
0 200 400 600 800 1000 1200
磁场强度 Magnetic Field Strength H(A/m)

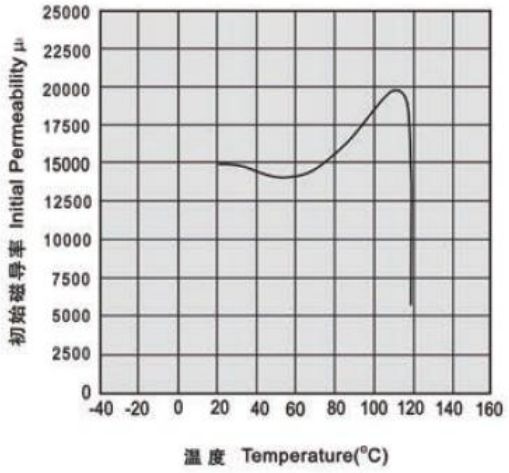

复数磁导率 Complex Permeability μ', μ"
100000
10000
1000
100
10
μ"
μ'
10 100 1000 10000
频率 Frequency(kHz)

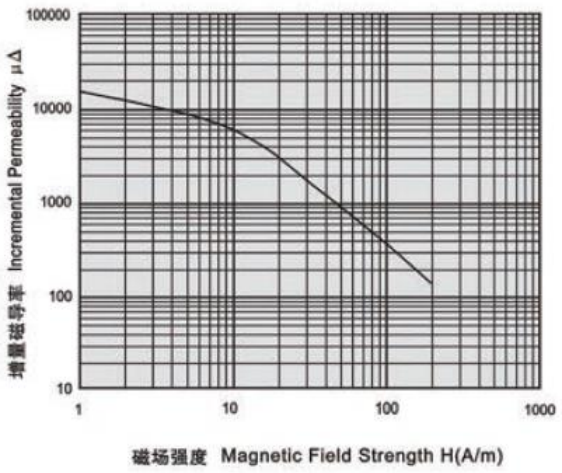
# YR76

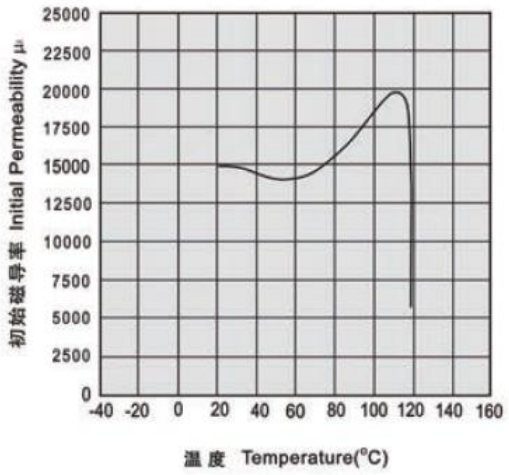
材料：YR76
特点：高磁导率(约 15000)

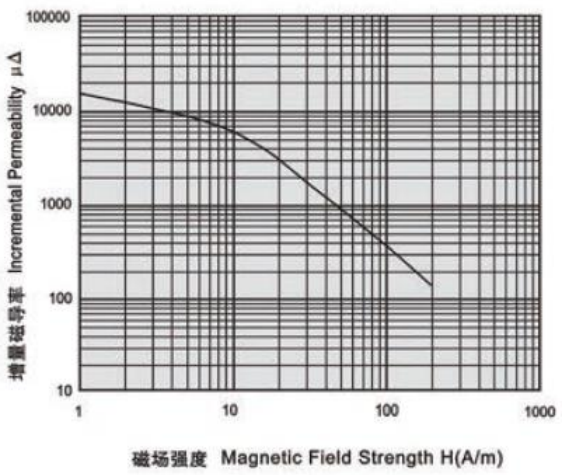
Material：YR76
Features：High initial permeability(about15000)

| | | | |
|---|---|---|---|
| 材质<br>Material | | | YR76 |
| 初始磁导率<br>Initial permeability | $\mu_i$ | | 15000±30% |
| 比损耗系数<br>Relative loss factor | $\tan\delta/\mu_i$ | $\times10^{-6}$ | ＜7.0（10kHz） |
| 饱和磁通密度 Saturation magnetic flux density<br>(H=1194A/m) | Bs | mT | 360 |
| 剩余磁通密度 Remanent flux density | Br | mT | 100 |
| 矫顽力<br>Coercive force | Hc | A/m | 3.2 |
| 比温度系数<br>Relative temperature coeffcient<br>(20～60℃) | $\alpha_{\mu r}$ | $\times10^{-6}$/℃ | －0.5～2.0 |
| 比磁滞损耗系数 Hysteresis material constant<br>25℃,10kHz,1.5～3mT | $\eta_B$ | $\times10^{-6}$/mT | ＜2.0 |
| 居里温度<br>Curie temperature | Tc | ℃ | ＞110 |
| 电阻率<br>Electrical resistivity | ρ | Ω·m | 0.05 |
| 密度<br>Density | d | $g/cm^3$ | 4.9 |


初始磁导率 Initial Permeability μi
25000
22500
20000
17500
15000
12500
10000
7500
5000
2500
0
-40 -20 0 20 40 60 80 100 120 140 160
温 度 Temperature(°C)


增量磁导率 Incremental Permeability μΔ
100000
10000
1000
100
10
1 10 100 1000
磁场强度 Magnetic Field Strength H(A/m)


初始磁导率 Initial Permeability μi
25000
22500
20000
17500
15000
12500
10000
7500
5000
2500
0
-40 -20 0 20 40 60 80 100 120 140 160
温 度 Temperature(°C)

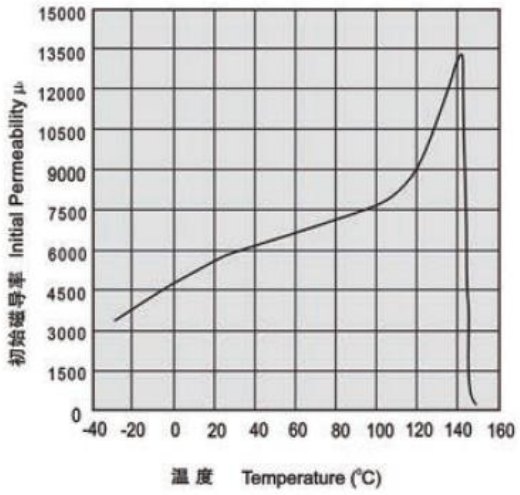

增量磁导率 Incremental Permeability μΔ
100000
10000
1000
100
10
1 10 100 1000
磁场强度 Magnetic Field Strength H(A/m)

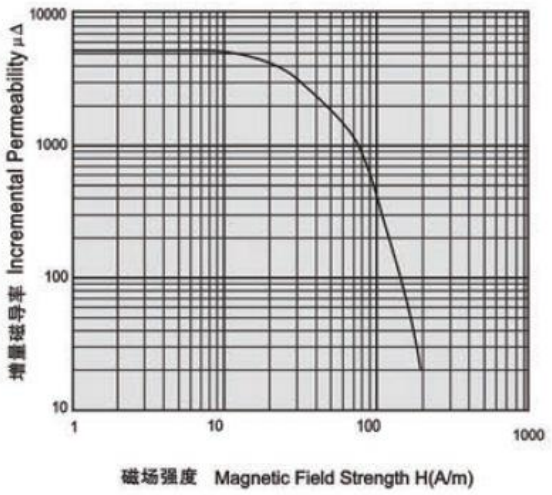
# YR36

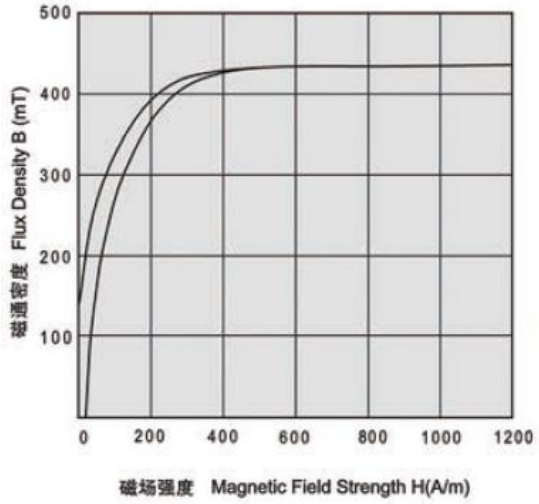
材料：YR36
特点：高磁导率(约 5000)
低比损耗因子
频率特性优良

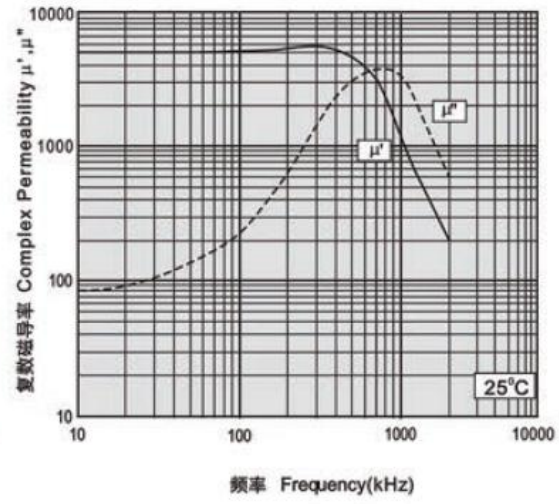
Material：YR36
Features：High initial permeability(about 5000)
Low relative loss factor
The initial permeability vs frequency Characteristis is good

| | | | |
|---|---|---|---|
| 材质<br>Material | | | YR36 |
| 初始磁导率<br>Initial permeability | $\mu_i$ | | 5000±25% |
| 比损耗系数<br>Relative loss factor | $\tan\delta/\mu_i$ | $\times10^{-6}$ | ＜15<br>（100kHz） |
| 饱和磁通密度 Saturation magnetic flux density<br>(H=1194A/m) | Bs | mT | 430 |
| 剩余磁通密度 Remanent flux density | Br | mT | 140 |
| 矫顽力<br>Coercive force | Hc | A/m | 8 |
| 比温度系数 Relative temperature coefficient （20～60℃） | $\alpha_{\mu r}$ | $\times10^{-6}$/℃ | －0.5～2.0 |
| 比磁滞损耗系数 Hysteresis material constant<br>25℃,10kHz,1.5～3mT | $\eta_B$ | $\times10^{-6}$/mT | ＜1 |
| 居里温度<br>Curie temperature | Tc | ℃ | ＞140 |
| 电阻率<br>Electrical resistivity | ρ | Ω·m | 0.5 |
| 密度<br>Density | d | $g/cm^3$ | 4.85 |


初始磁导率 Initial Permeability μi
15000
13500
12000
10500
9000
7500
6000
4500
3000
1500
0
-40 -20 0 20 40 60 80 100 120 140 160
温 度 Temperature (°C)


增量磁导率 Incremental Permeability μΔ
10000
1000
100
10
1 10 100 1000
磁场强度 Magnetic Field Strength H(A/m)


磁通密度 Flux Density B (mT)
500
400
300
200
100
0 200 400 600 800 1000 1200
磁场强度 Magnetic Field Strength H(A/m)

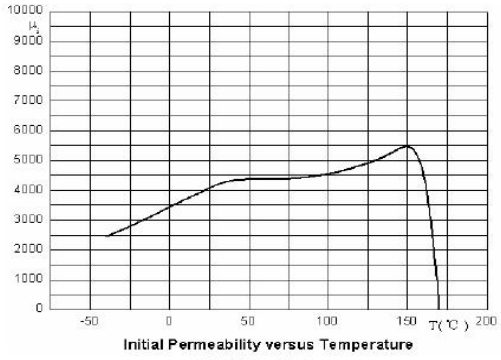

复数磁导率 Complex Permeability μ', μ"
10000
1000
100
10
μ"
μ'
25°C
10 100 1000 10000
频率 Frequency(kHz)

# YR36DC

材料：YR36DC
特点：低比损耗因子
低磁滞损耗系数

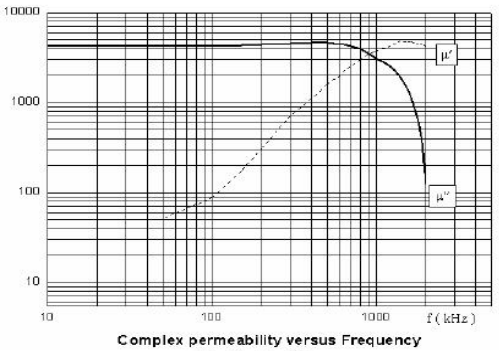
Material：YR36DC
Features：Low relative loss factor
Low hysteresis material constant

| 材质 Material | | | YR36DC |
|---|---|---|---|
| 初始磁导率 Initial permeability | $\mu_i$ | | 4000±25% |
| 比损耗系数 Relative loss factor | $\tan\delta/\mu_i$ | $\times10^{-6}$ | ＜3.5 （10kHz） |
| 饱和磁通密度 Saturation magnetic flux density (H=1194A/m) | Bs | mT | 450 |
| 剩余磁通密度 Remanent flux density | Br | mT | |
| 矫顽力 Coercive force | Hc | A/m | 6.5 |
| 比温度系数 Relative temperature coefficient (20～60℃) | $\alpha_{\mu r}$ | $\times10^{-6}$/℃ | |
| 比磁滞损耗系数 Hysteresis material constant 25℃,10kHz,1.5～3mT | $\eta_B$ | $\times10^{-6}$/mT | ＜0.8 |
| 居里温度 Curie temperature | Tc | ℃ | ＞150 |
| 电阻率 Electrical resistivity | ρ | Ω·m | 0.65 |
| 密度 Density | d | $g/cm^3$ | 4.85 |




Initial Permeability versus Temperature

磁导率与温度关系




Complex permeability versus Frequency

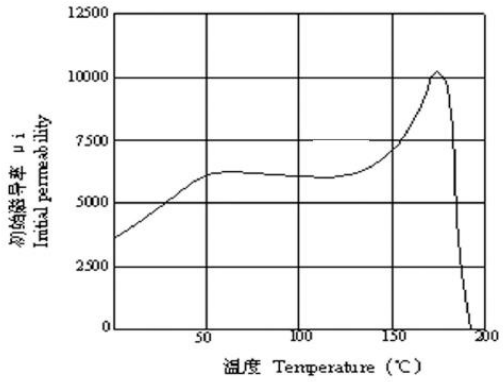
磁 谱 曲 线

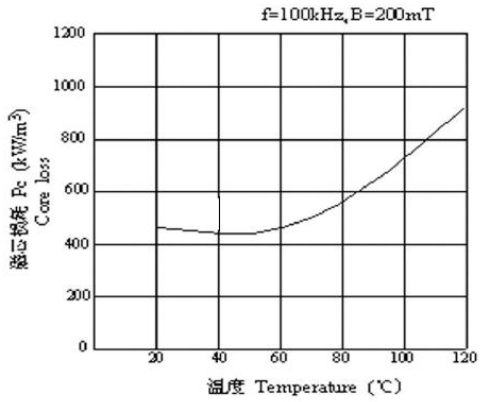
# YR36B

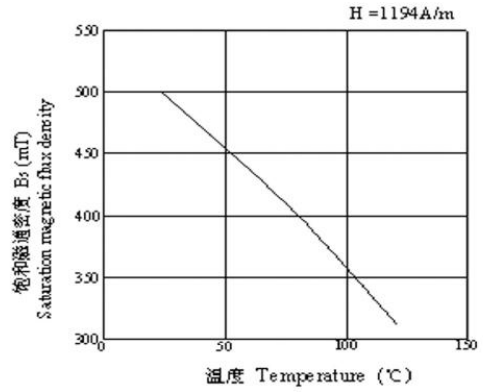
材料：YR36B
特点：高磁导率(约 4500)
高饱和磁通密度
低比损耗因子

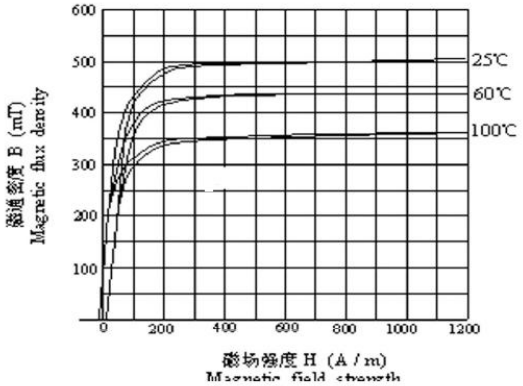
Material：YR36B
Features：High initial permeability(about 4500)
High saturation magnetic flux density
Low relative loss factor

| 材质<br>Material | | | YR36B |
|---|---|---|---|
| 初始磁导率<br>Initial permeability | $\mu_i$ | | 4500±25% |
| 比损耗系数<br>Relative loss factor | $\tan\delta/\mu_i$ | $\times10^{-6}$ | ＜10<br>（10kHz） |
| 饱和磁通密度 Saturation magnetic flux density<br>(H=1194A/m) | Bs | mT | 500<br>（25℃）<br>360<br>（100℃） |
| 剩余磁通密度 Remanent flux density | Br | mT | 120 |
| 矫顽力<br>Coercive force | Hc | A/m | 11 |
| 比温度系数 Relative temperature coefficient　(20～60℃) | $\alpha_{\mu r}$ | $\times10^{-6}$/℃ | 0～1.5 |
| 比磁滞损耗系数 Hysteresis material constant<br>25℃,10kHz,1.5～3mT | $\eta_B$ | $\times10^{-6}$/mT | |
| 居里温度<br>Curie temperature | Tc | ℃ | ＞190 |
| 电阻率<br>Electrical resistivity | ρ | Ω·m | 0.3 |
| 密度<br>Density | d | $g/cm^3$ | 4.9 |


12500
10000
7500
5000
2500
0
50
100
150
200
初始磁导率 μi
Initial permeability
温度 Temperature (℃)


f=100kHz, B=200mT
1200
1000
800
600
400
200
0
20
40
60
80
100
120
磁芯损耗 Pc (kW/m³)
Core loss
温度 Temperature (℃)


H =1194A/m
550
500
450
400
350
300
0
50
100
150
饱和磁通密度 Bs (mT)
Saturation magnetic flux density
温度 Temperature (℃)


600
500
400
300
200
100
0
200
400
600
800
1000
1200
25℃
60℃
100℃
磁通密度 B (mT)
Magnetic flux density
磁场强度 H (A/m)