# 低パワーロス材標準材質特性
## Low Power Loss Material Characteristics

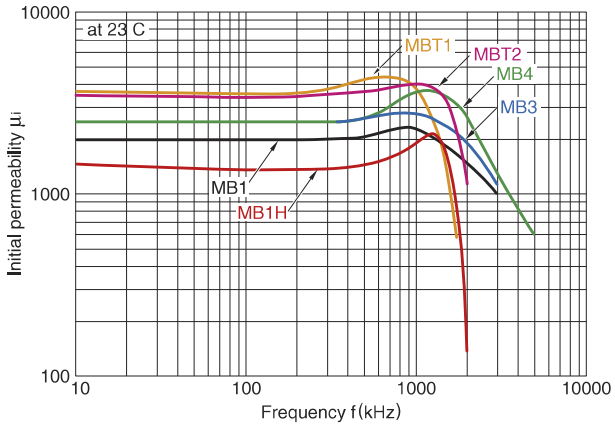
### 標準材質特性
### Material Characteristics

| 材質名 Material | | | MB1 | MB1H | MB3 | MB4 | MBT1 | MBT2 |
|---|---|---|---|---|---|---|---|---|
| 初透磁率<br>Initial permeability | μi | 23°C | 2000±25% | 1600±25% | 2500±25% | 2500±25% | 3400±25% | 3300±25% |
| 実効飽和磁束密度(1200A/m)<br>Saturation flux density at 1200A/m | Bms<br>(mT) | 23°C | 510 | 540 | 510 | 520 | 510 | 530 |
| | | 60°C | 470 | 505 | 450 | 470 | 460 | 470 |
| | | 100°C | 420 | 460 | 390 | 400 | 390 | 400 |
| 実効飽和残留磁束密度<br>Remanence | Brms<br>(mT) | 23°C | 310 | 300 | 130 | 130 | 90 | 75 |
| | | 60°C | 170 | 170 | 90 | 88 | 70 | 55 |
| | | 100°C | 80 | 80 | 55 | 54 | 60 | 45 |
| 実効飽和保磁力<br>Coercivity | Hcms<br>(A/m) | 23°C | 14.0 | 16.1 | 14.3 | 12.7 | 9.0 | 8.0 |
| | | 60°C | 9.4 | 10.5 | 10.3 | 8.0 | 7.0 | 6.0 |
| | | 100°C | 6.1 | 7.3 | 8.8 | 6.4 | 6.0 | 5.0 |
| パワーロス(100kHz, 200mT)<br>Power loss at 100kHz, 200mT | Pcv<br>(kW/m³) | 23°C | 870(900max.) | 980(1070max.) | 650(700max.) | 575(630max.) | 395(450max.) | 370(425max.) |
| | | 60°C | 600(620max.) | 600(670max.) | 440(500max.) | 375(430max.) | 325(430max.) | 310(365max.) |
| | | 100°C | 420(440max.) | 380(450max.) | 350(410max.) | 270(300max.) | 340(380max.) | 300(340max.) |
| | | 120°C | 475(490max.) | 550(630max.) | 390(500max.) | 350(400max.) | 390(430max.) | 360(410max.) |
| キュリー温度<br>Curie temperature | Tc<br>(°C) | | 255min. | 300min. | 215min. | 215min. | 220min. | 215min. |
| 抵抗率<br>Resistivity | ρ<br>(Ωm) | | 6min. | 6min. | 6min. | 4.5min. | 4min. | 4min. |
| 密度<br>Density | d<br>(kg/m³) | | 4.9×10³ | 4.9×10³ | 4.9×10³ | 4.9×10³ | 4.8×10³ | 4.8×10³ |

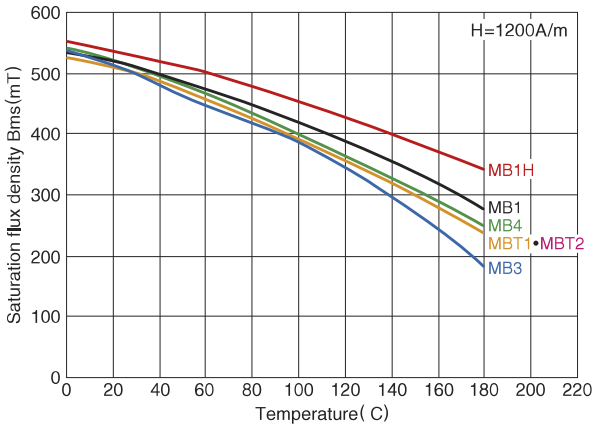
1A/m=4π×10⁻³Oe, 1mT=10Gauss

材質評価コア(R31/19/8Aリングコア)における特性を示しています。

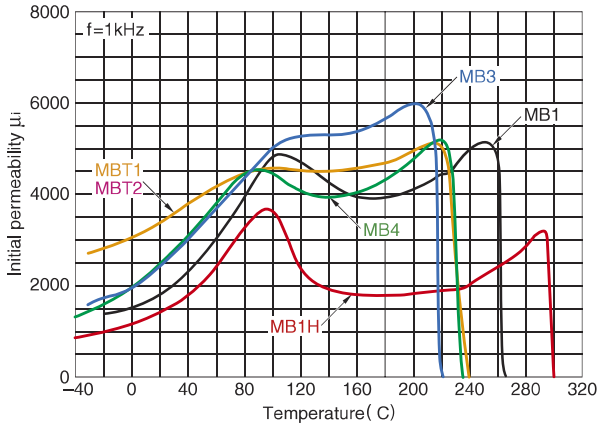
### μi-周波数特性
### Permeability vs. Frequency(Typical)




### Bms-温度特性
### Saturation flux density vs. Temperature(Typical)




### μi-温度特性
### Permeability vs. Temperature(Typical)




Specifications which provide more details for the proper and safe use of the described product are available upon request.
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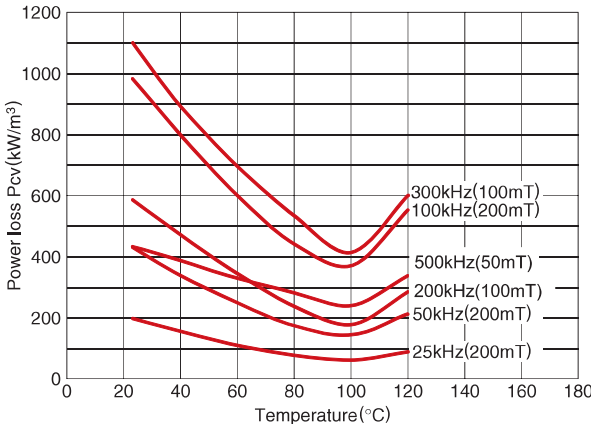
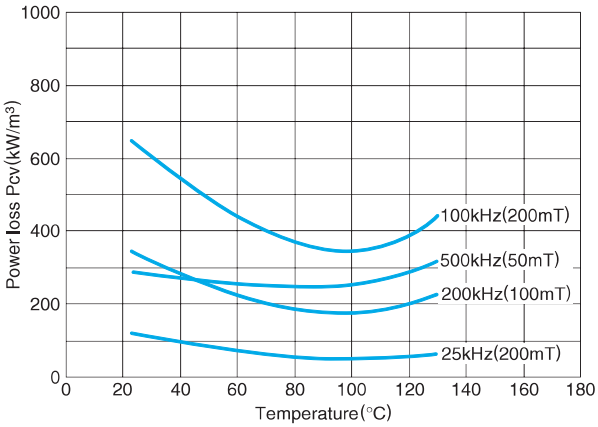
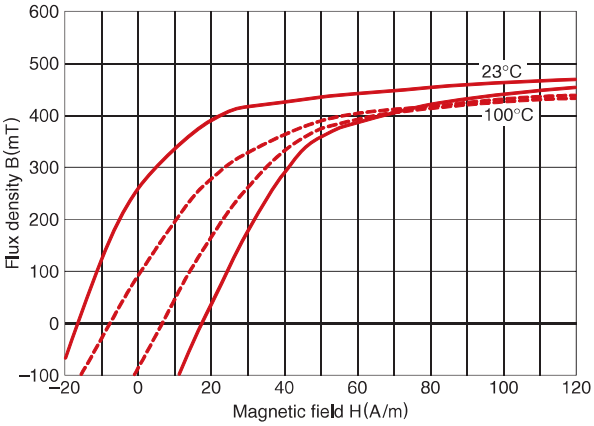
MB1H パワーロス-温度特性
MB1H Power loss vs. Temperature(Typical)



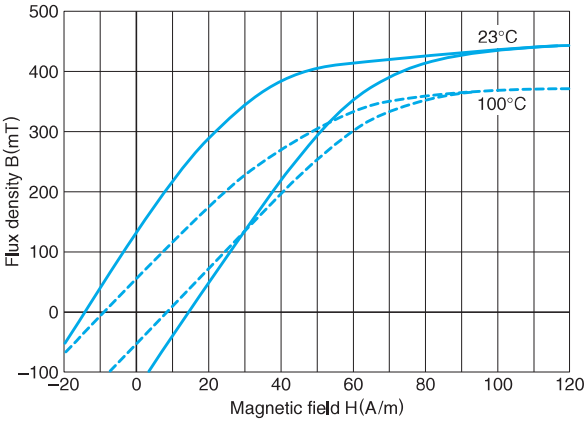

MB3 パワーロス-温度特性
MB3 Power loss vs. Temperature(Typical)



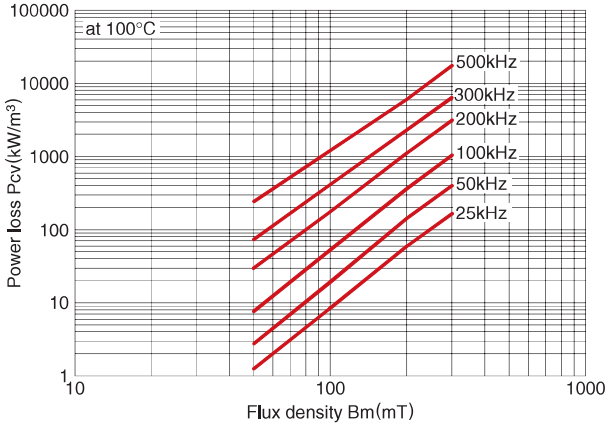

MB1H 直流ヒステリシス特性
MB1H Static magnetization curves(Typical)



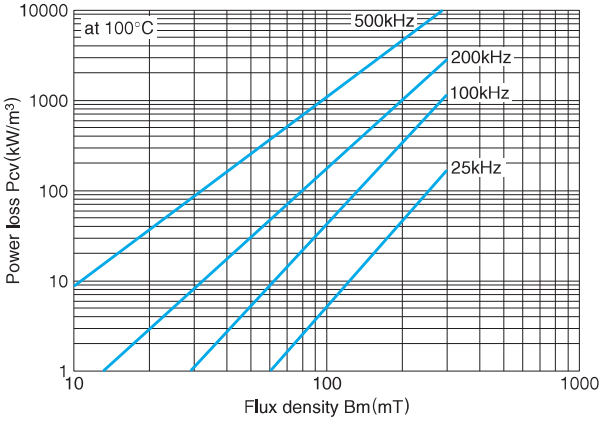

MB3 直流ヒステリシス特性
MB3 Static magnetization curves(Typical)




MB1H パワーロス-磁束密度特性
MB1H Power loss vs. Flux density(Typical)




MB3 パワーロス-磁束密度特性
MB3 Power loss vs. Flux density(Typical)




製品をより正しく、安全にご使用いただくために、さらに詳細な特性・仕様をご確認いただける納入仕様書をぜひご請求ください。
記載内容は、改良その他により予告なく変更する場合がありますので、あらかじめご了承ください。

# 低パワーロス材標準材質特性
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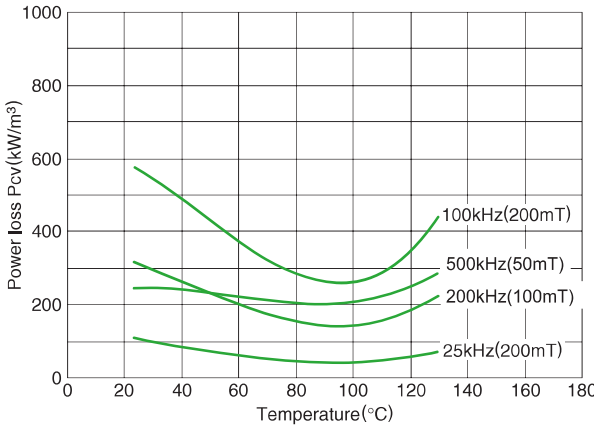
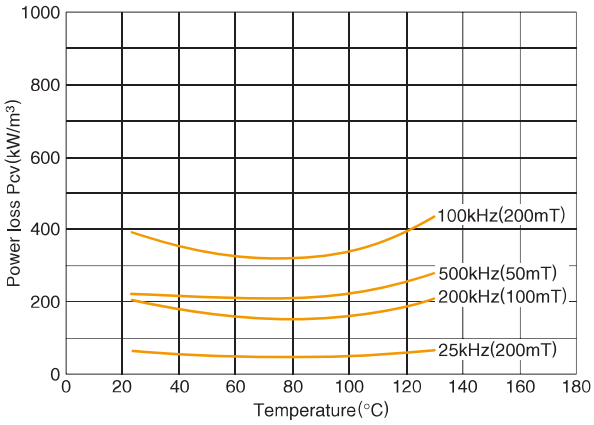
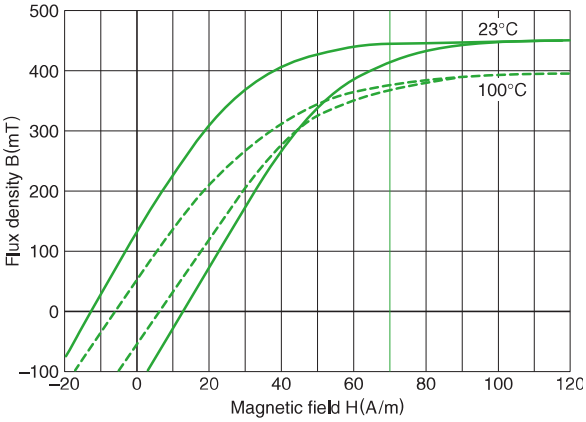
MB4 パワーロス-温度特性
MB4 Power loss vs. Temperature(Typical)



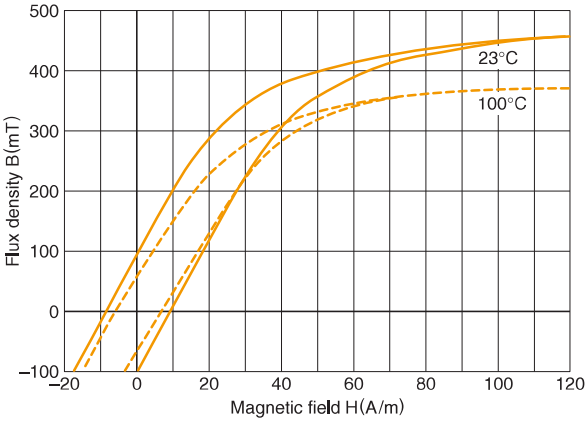

MBT1 パワーロス-温度特性
MBT1 Power loss vs. Temperature(Typical)



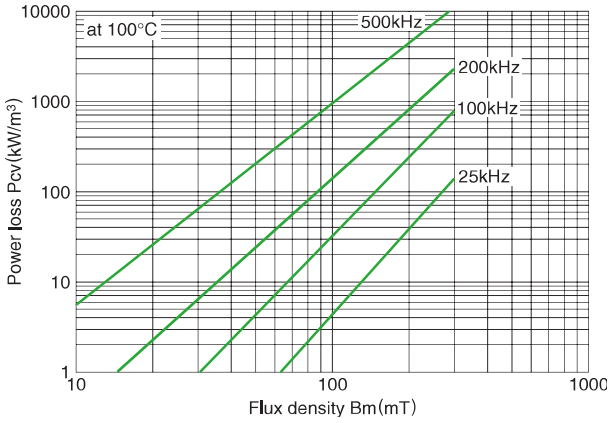

MB4 直流ヒステリシス特性
MB4 Static magnetization curves(Typical)



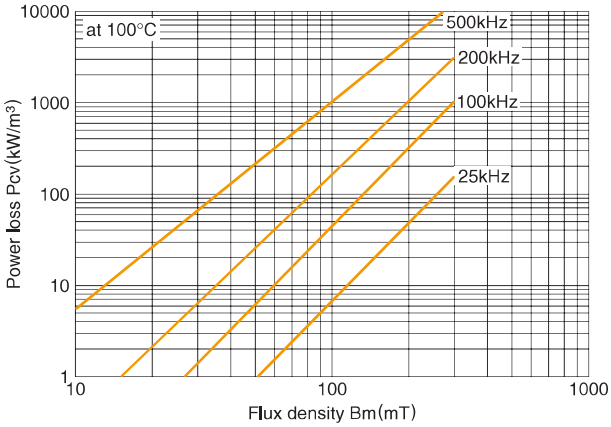

MBT1 直流ヒステリシス特性
MBT1 Static magnetization curves(Typical)




MB4 パワーロス-磁束密度特性
MB4 Power loss vs. Flux density(Typical)




MBT1 パワーロス-磁束密度特性
MBT1 Power loss vs. Flux density(Typical)

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