

■磁気特性 Magnetic Properties

| 項目<br>Item  |                             | SAM-15               | SAM-5                | SAM-15R              | SAMLET-9R            | SAM-13A              | SAMLET-10A           |
|---|-----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 残留磁束密度 Br<br>Residual Induction                   | mT<br>(kG)                  | 780~810<br>(7.8~8.1) | 380~440<br>(3.8~4.4) | 730~810<br>(7.3~8.1) | 600~660<br>(6.0~6.6) | 700~760<br>(7.0~7.6) | 620~680<br>(6.2~6.8) |
| 保磁力<br>Coercive Force                             | HcB kA/m<br>(kOe)           | 460~510<br>(5.8~6.4) | 240~280<br>(3.0~3.5) | 448~520<br>(5.6~6.5) | 370~450<br>(4.6~5.6) | 414~480<br>(5.2~6.0) | 400~490<br>(5.0~6.2) |
|   | HcJ kA/m<br>(kOe)           | 720~950<br>(9~12)    | 800~1030<br>(10~13)  | 720~950<br>(9~12)    | 720~950<br>(9~12)    | 720~950<br>(9~12)    | 720~950<br>(9~12)    |
| 最大エネルギー積(BH) max<br>Maximum Energy Product (MGOe) | kJ/m <sup>3</sup><br>(MGOe) | 103~120<br>(13~15)   | 28~40<br>(3.5~5)     | 88~120<br>(11~15)    | 60~76<br>(7.5~9.5)   | 80~103<br>(10~13)    | 68~84<br>(8.5~10.5)  |
| 飽和着磁磁場<br>Saturation Magnetizing Force (kOe)      | kA/m<br>(kOe)               | ≥1600<br>(≥20)       | ≥1600<br>(≥20)       | ≥1600<br>(≥20)       | ≥1600<br>(≥20)       | ≥1600<br>(≥20)       | ≥1600<br>(≥20)       |
| 可逆透磁率<br>Recoil Permeability                      | -                           | 1.05                 | 1.05                 | 1.05                 | 1.05                 | 1.05                 | 1.05                 |
| 可逆温度係数<br>Reversible Temp. Coefficient            | %/°C                        | -0.035               | -0.035               | -0.035               | -0.035               | -0.035               | -0.035               |
| 密度(未コーティング時)<br>Density (without coating)         | Mg/m <sup>3</sup>           | 6.6~7.2              | 6.6~7.2              | 6.6~7.2              | 5.7~6.1              | 6.6~7.2              | 5.7~6.1              |
| 成形方法<br>Molding Method                            |                             | 圧縮成形<br>Compaction   |                      | 圧縮成形<br>Compaction   | 射出成形<br>Injection    | 圧縮成形<br>Compaction   | 射出成形<br>Injection    |
| 異方性方向<br>Magnetic Orientation                     |                             | 横異方性<br>Transverse   | 等方性<br>Isotropic     | ラジアル異方性<br>Radial    |                      | 縦異方性<br>Axial        |                      |

寸法・形状により上記数値は異なります。

The above figures are subject to change depending on magnet shape and dimension.

■物理的、機械的特性 Physical and Mechanical Properties

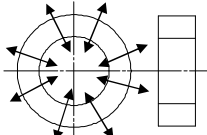
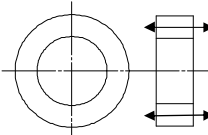
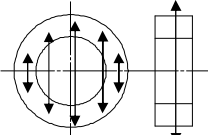
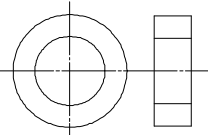
● SAM series

| 項目<br>Item                             | 特性<br>Properties             |
|--|------------------------------|
| 硬さ<br>Hardness                         | Hv<br>80~120                 |
| 熱膨張係数<br>Thermal Expansion Coefficient | 10 <sup>-5</sup> /°C<br>1.30 |
| 圧縮強さ<br>Compressive Strength           | MPa<br>31                    |
| ヤング率<br>Young's Modulus                | MPa<br>2.9 × 10 <sup>4</sup> |
| 電気抵抗<br>Electric Resistivity           | Ω·m<br>0.044                 |

● SAMLET series

| 項目<br>Item                             | 特性<br>Properties             |
|--|------------------------------|
| 硬さ<br>Hardness                         | HR15T<br>90~130              |
| 引張り強さ<br>Tensile Expansion Coefficient | MPa<br>29                    |
| 伸び<br>Elongation Percentage            | %<br>2.5~3.0                 |
| ヤング率<br>Young's Modulus                | MPa<br>0.3 × 10 <sup>4</sup> |
| 電気抵抗<br>Electric Resistivity           | Ω·m<br>0.008                 |

■異方性及び等方性 Anisotropic and Isotropic

| ラジアル異方性 Radial  | 縦異方性 Axial  | 横異方性 Transverse  | 等方性 Isotropic   |
|---|---|--|---|
|  |  |  |  |