



Temperature in [°C]:                      **20.0**                      **80.0**                      **100.0**                      **125.0**                      **180.0**

**magnetic properties**

|  |             |        |                   |      |      |
|--|-------------|--------|-------------------|------|------|
| Remanence 20°C                                   | Br min      | 0.515  | T                 | 5.2  | kG   |
|  | Br nom      | 0.525  | T                 | 5.3  | kG   |
| Coercivity 20°C                                  | HcB min     | 330    | kA/m              | 4.1  | kOe  |
|  | HcB nom     | 360    | kA/m              | 4.5  | kOe  |
| Intrinsic Coercivity 20°C                        | HcJ min     | 800    | kA/m              | 10.1 | kOe  |
|  | HcJ nom     | 905    | kA/m              | 11.4 | kOe  |
| Maximum Energy Product 20°C                      | BH max, min |        | kJ/m <sup>3</sup> |      | MGOe |
|  | BH max, nom | 47.1   | kJ/m <sup>3</sup> | 5.9  | MGOe |
| Reversible Temperature Coefficient <sup>1)</sup> | α Br nom    | -0.130 | %/°C              |      |      |
|  | β HcJ nom   | -0.400 | %/°C              |      |      |

**material properties (typical values)**

|  |       |         |                   |  |  |
|--|-------|---------|-------------------|--|--|
| Max. Operating Temperature <sup>2)</sup> | T max | 180     | °C                |  |  |
| Density                                  | ρ     | 5.2     | g/cm <sup>3</sup> |  |  |
| Permeability 20°C                        | μr    | 1.16    |                   |  |  |
| Flexural Strength                        |       | ca. 108 | Mpa               |  |  |
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1) The shown temperature coefficients are nominal reference values only . They can vary for different temperatures and don't need to be linear.  
2) The maximum operating temperature is depending on the magnet shape, size and on the specific application.

Note:                      The above plotted graphs are idealized and represent theoretical values of the material. Shown are curves according nominal values based on uncoated material samples according to IEC 60404-5. Material and magnetic data represent typical data that may vary due to product shape, size and coating. Please contact Bomatec regarding specific requirements for your application.