

## Material Characteristics

| ITEM                             | Symbol                | Unit              | Measurtionsing Conditions |       | Material |
|----------------------------------|-----------------------|-------------------|---------------------------|-------|----------|
|                                  |                       |                   | settings                  | Temp. | KL16B    |
| Initial permeability             | $\mu_i$               |                   |                           | 20°C  | 1600±25% |
| Saturation magnetic flux density | Bs                    | mT                | H=1000A/m                 | 20°C  | 500      |
|                                  |                       |                   |                           | 100°C | 420      |
| Remanent flux density            | Br                    | mT                | H=1000A/m                 | 20°C  | 160      |
|                                  |                       |                   |                           | 100°C | 80       |
| Coercive force                   | Hc                    | A/m               | H=1000A/m                 | 20°C  | 16       |
|                                  |                       |                   |                           | 100°C | 7        |
| Core loss volume density         | Pcv                   | kW/m <sup>3</sup> |                           | 20°C  | 900      |
|                                  |                       |                   |                           | 60°C  | 550      |
|                                  |                       |                   |                           | 80°C  | 450      |
|                                  |                       |                   |                           | 100°C | 550      |
|                                  |                       |                   |                           | 120°C | 750      |
| Relative loss factor             | $\tan \delta / \mu_i$ | $\times 10^{-6}$  |                           |       | 5        |
| Curie temperature                | Tc                    | °C                |                           |       | > 250    |
| Electrical resistivity           | $\rho$                | $\Omega \cdot m$  |                           |       | 6        |
| Density                          | ds                    | g/cm <sup>3</sup> |                           |       | 4.9      |

