

DATA SHEET

3E15

Material specification

2016 June 09

3E15 SPECIFICATION

A high permeability material for use in wideband transformers as well as EMI suppression filters and signal processing.

SYMBOL	CONDITIONS	VALUE	UNIT
μ_i	25°C; 10kHz; 0.25mT	15000 ± 30%	
B	25°C; 10kHz; 1200A/m	≈ 470	mT
	100°C; 10kHz; 1200A/m	≈ 290	
tan δ/μ_i	25°C; 10kHz; 0.25mT	≤ 10	10 ⁻⁶
	25°C; 30kHz; 0.25mT	≤ 15	10 ⁻⁶
ρ_{DC}	25°C	≈ 0.5	Ωm
Tc		≥ 130	°C
density		≈ 5000	kg / m ³

Measured on non-stressed ring T14/9/5

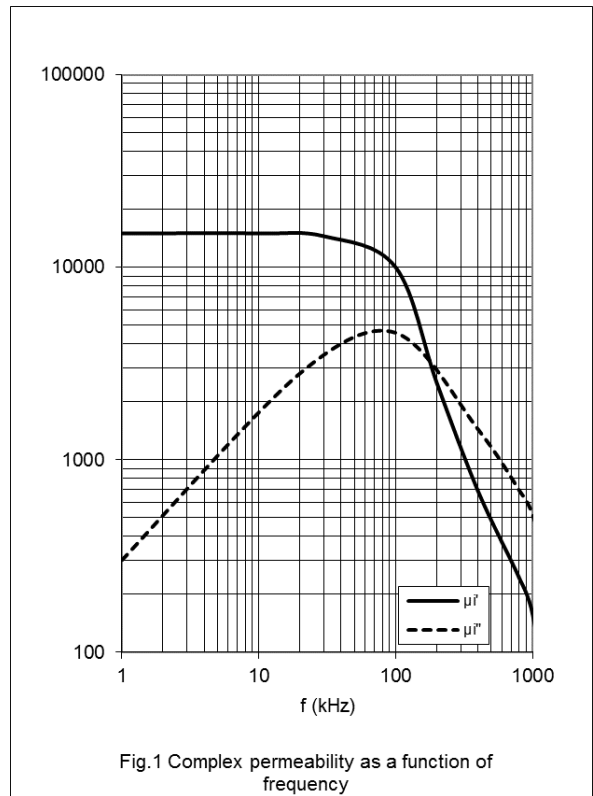


Fig.1 Complex permeability as a function of frequency

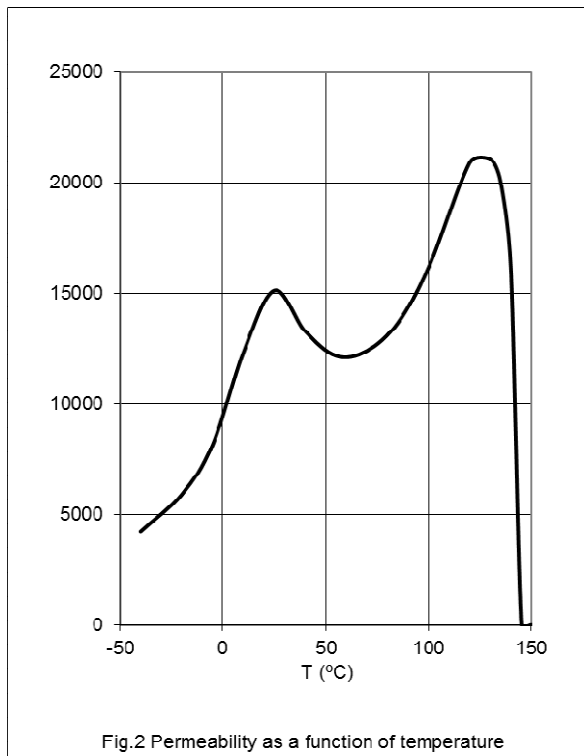


Fig.2 Permeability as a function of temperature

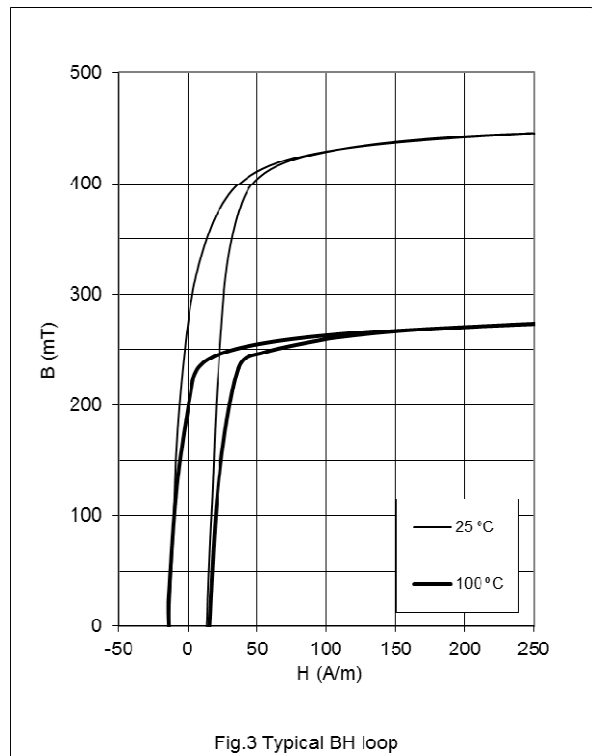


Fig.3 Typical BH loop