

DATA SHEET

3C95F

Material specification

2017 January 18th

3C95F SPECIFICATION

A medium frequency power material optimized for 200-400kHz power conversion, with flat losses in 25-100°C.

SYMBOL	CONDITIONS	VALUE	UNIT
μ_i	25°C; 10kHz; 0.25mT	3000 $\pm$ 25%	
μ_a	100°C; 25kHz; 200mT	$\approx$ 4500	
B	25°C; 10kHz; 1200A/m	$\approx$ 550	mT
	100°C; 10kHz; 1200A/m	$\approx$ 430	
Pv	25°C; 200kHz; 125mT	$\approx$ 220	k W / m ³
	60°C; 200kHz; 125mT	$\approx$ 240	
	80°C; 200kHz; 125mT	$\approx$ 240	
	100°C; 200kHz; 125mT	$\approx$ 250	
Pv	25°C; 300kHz; 100mT	$\approx$ 220	k W / m ³
	60°C; 300kHz; 100mT	$\approx$ 260	
	80°C; 300kHz; 100mT	$\approx$ 260	
	100°C; 300kHz; 100mT	$\approx$ 270	
ρ_{DC}	25°C	$\approx$ 10	Ωm
Tc		$\geq$ 210	°C
density		$\approx$ 4850	k g / m ³

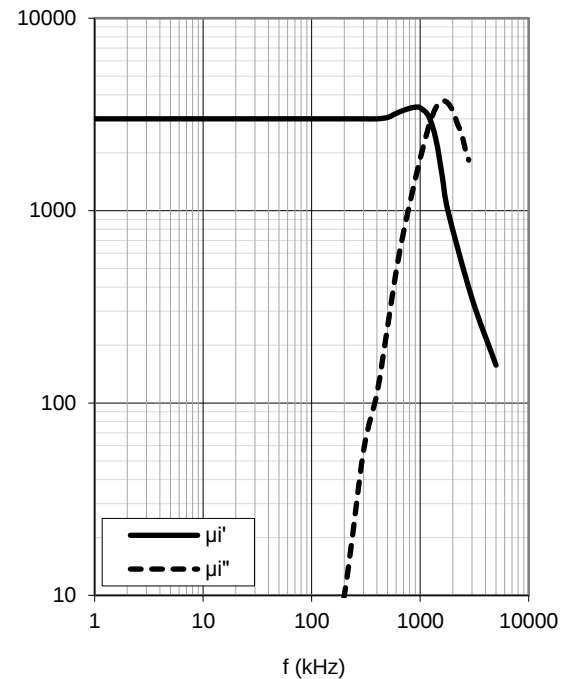


Fig.1 Complex permeability as function of frequency

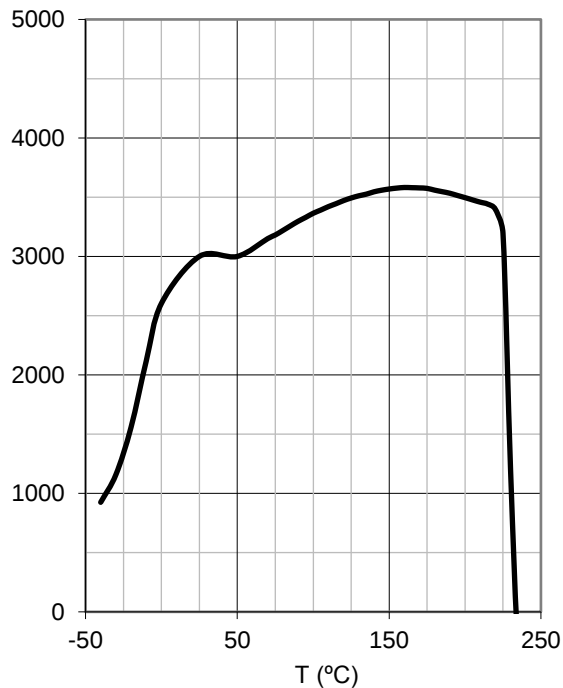


Fig.2 Permeability as function of temperature

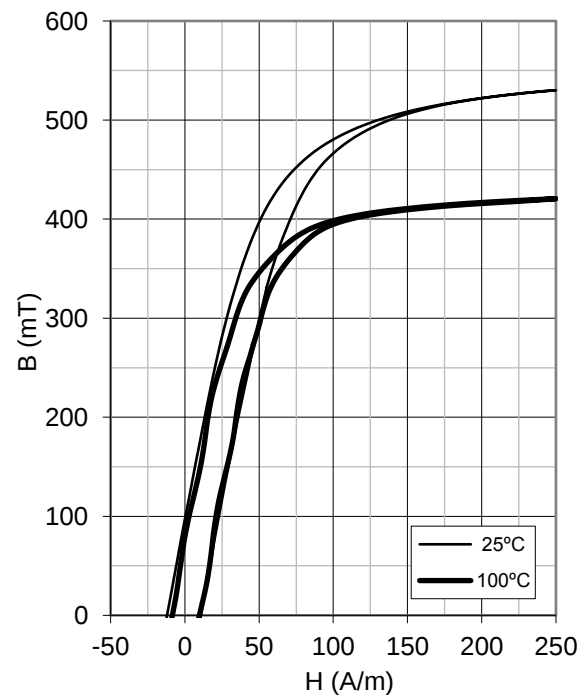


Fig.3 Typical BH loop

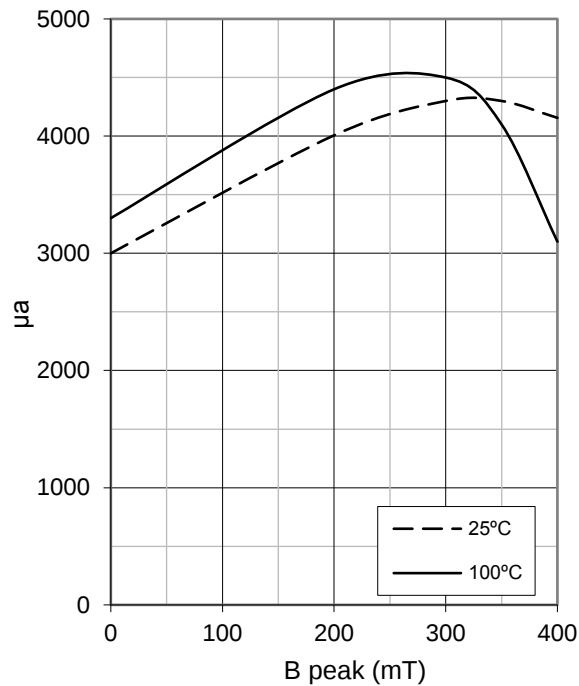


Fig.4 Amplitude permeability

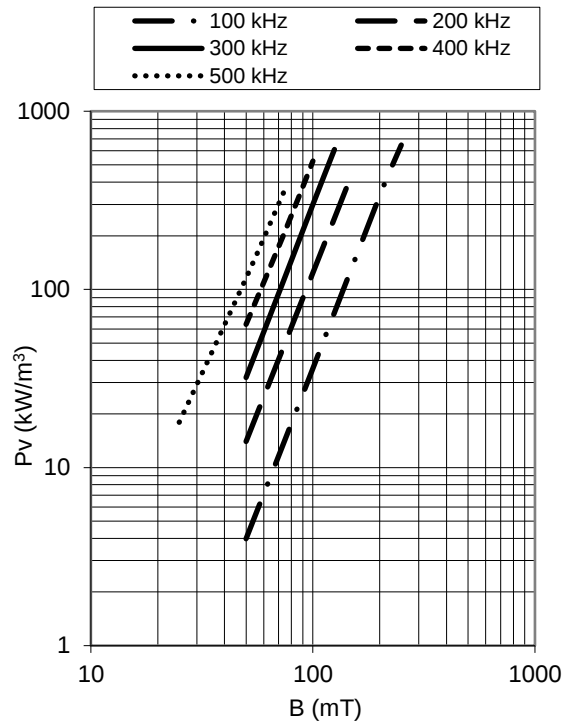


Fig.5 Power loss as function of peak flux density at 100°C

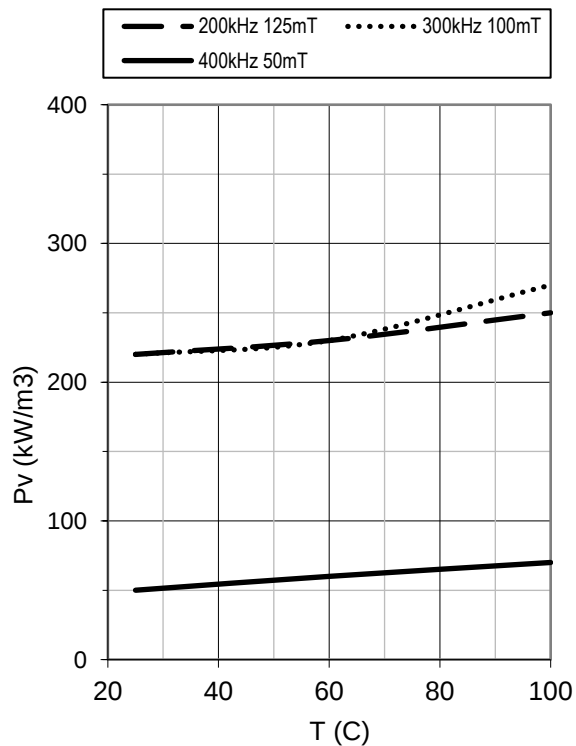


Fig.6 Power loss as function of Temperature