

DATA SHEET

P66/56

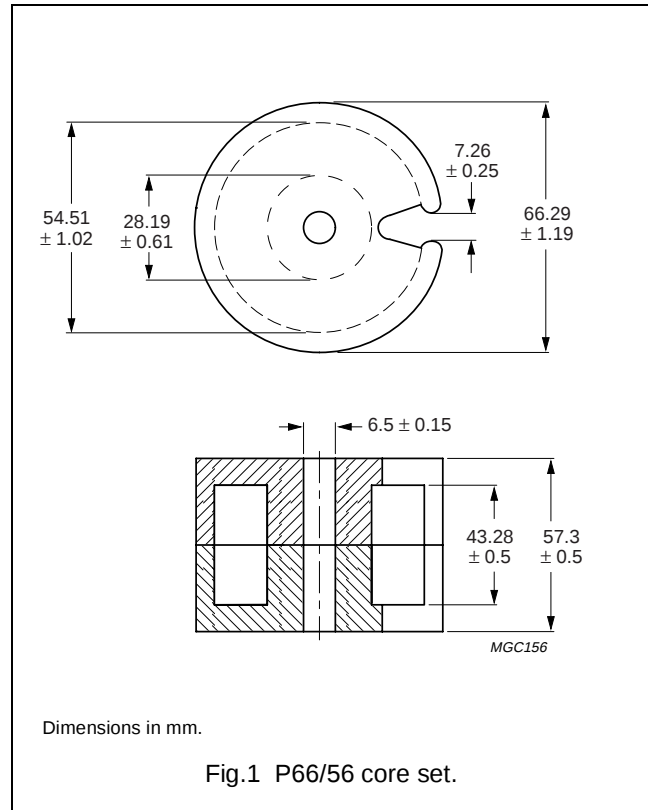
P cores and accessories

Supersedes data of February 2002

2004 Sep 01

CORE SETS**Effective core parameters**

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.172	mm ⁻¹
V_e	effective volume	88200	mm ³
l_e	effective length	123	mm
A_e	effective area	717	mm ²
A_{min}	minimum area	591	mm ²
m	mass of set	≈ 550	g

**Core sets for general purpose transformers and power applications**Clamping force for A_L measurements, 1000 ± 300 N.

GRADE	A_L (nH)	μ_e	AIR GAP (μ m)	TYPE NUMBER
3C81	18200 ± 25%	≈ 2490	≈ 0	P66/56-3C81
3C91 des	18200 ± 25%	≈ 2490	≈ 0	P66/56-3C91
3F3	12350 ± 25%	≈ 1690	≈ 0	P66/56-3F3

Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at			
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; $\hat{B}$ = 200 mT; T = 100 °C	f = 100 kHz; $\hat{B}$ = 100 mT; T = 100 °C	f = 100 kHz; $\hat{B}$ = 200 mT; T = 100 °C	f = 400 kHz; $\hat{B}$ = 50 mT; T = 100 °C
3C81	≥ 320	≤ 25	—	—	—
3C91	≥ 315	—	≤ 4.7 ⁽¹⁾	≤ 33 ⁽¹⁾	—
3F3	≥ 315	—	≤ 10	—	≤ 20

Note

1. Measured at 60 °C.

DATA SHEET STATUS DEFINITIONS

DATA SHEET STATUS	PRODUCT STATUS	DEFINITIONS
Preliminary specification	Development	This data sheet contains preliminary data. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.
Product specification	Production	This data sheet contains final specifications. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.

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PRODUCT STATUS DEFINITIONS

STATUS	INDICATION	DEFINITION
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Preferred		These products are recommended for use in current designs and are available via our sales channels.
Support		These products are not recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.