

# DATA SHEET

**TN20/10/7**  
Ferrite toroids

Supersedes data of February 2002

2004 Sep 01

**RING CORES (TOROIDS)**

**Effective core parameters**

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.30	mm <sup>-1</sup>
$V_e$	effective volume	1465	mm <sup>3</sup>
$l_e$	effective length	43.6	mm
$A_e$	effective area	33.6	mm <sup>2</sup>
m	mass of core	≈ 7.7	g

**Coating**

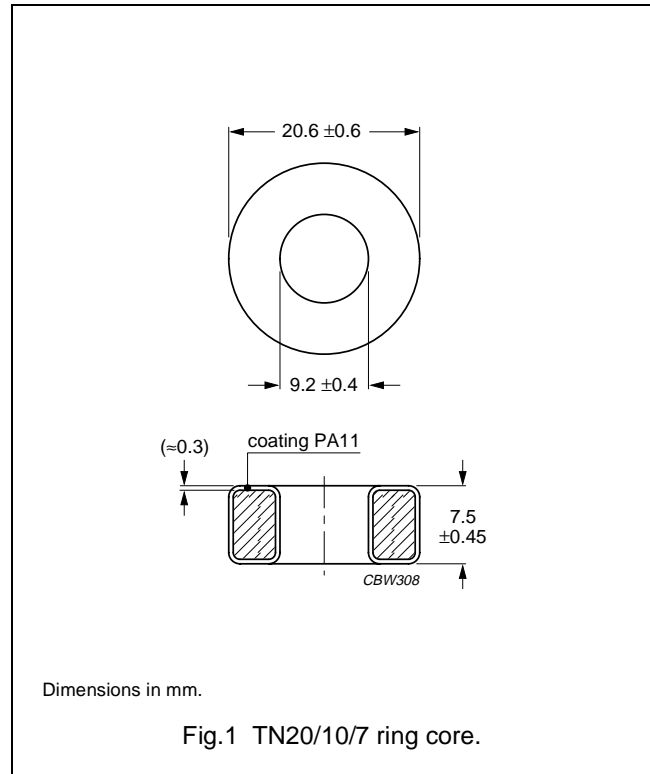
The cores are coated with polyamide 11 (PA11), flame retardant in accordance with "UL 94V-2"; UL file number E 45228 (M).

The colour is white.

**Isolation voltage**

DC isolation voltage: 2000 V.

Contacts are applied on the edge of the ring core, which is also the critical point for the winding operation.



**Ring core data**

GRADE	$A_L$ (nH)	$\mu_i$	TYPE NUMBER
4C65	121 ± 25%	≈ 125	TN20/10/7-4C65
3C90	2230 ± 25%	≈ 2300	TN20/10/7-3C90
3C11	4150 ± 25%	≈ 4300	TN20/10/7-3C11
3E25	5340 ± 25%	≈ 5500	TN20/10/7-3E25

**Properties of cores 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
3C90	≥ 320	≤ 0.15	≤ 0.16

## Ferrite toroids

TN20/10/7




## 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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<b>Design-in</b>		These products are recommended for new designs.
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