

DATA SHEET

TL42/26/13

Ferrite ring cores (toroids)

Product specification
Supersedes data of 1997 Nov 21
File under Ferrite Ceramics, MA01

2000 Apr 20

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RING CORES (TOROIDS)

Effective core parameters

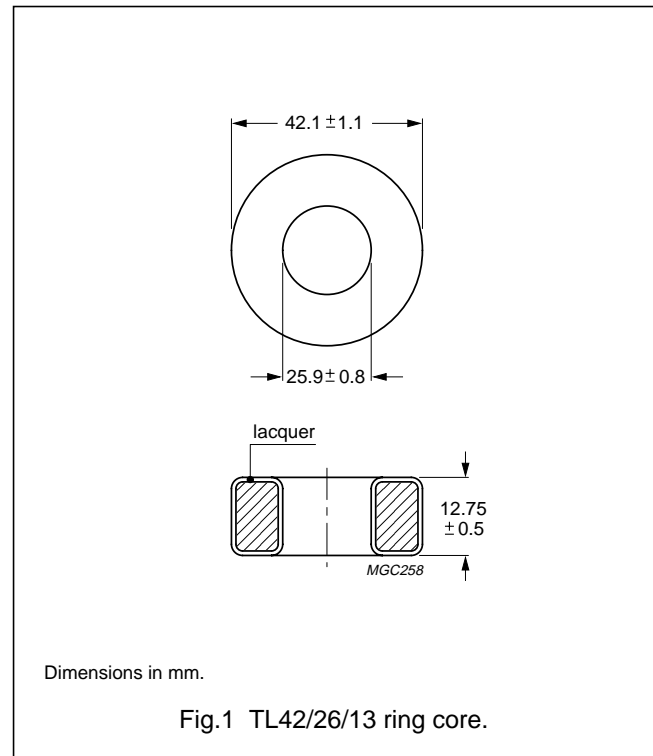
SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(I/A)$	core factor (C1)	1.076	mm ⁻¹
V_e	effective volume	9860	mm ³
l_e	effective length	103	mm
A_e	effective area	95.8	mm ²
m	mass of core	≈53	g

Coating

The cores are coated with polyurethane lacquer, flame retardant in accordance with "UL 94V-2"; UL file number E 192048.

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)	μ_i	COLOUR CODE	TYPE NUMBER
3C90 <small>des</small>	2690 ±25%	≈2300	ultramarine/white	TL42/26/13-3C90
3C11	5000 ±25%	≈4300	white	TL42/26/13-3C11
3E25	6425 ±25%	≈5500	orange/white	TL42/26/13-3E25
4A11	820 ±25%	≈700	pink/white	TL42/26/13-4A11

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	≤1.1	≤1.1

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DATA SHEET STATUS DEFINITIONS

DATA SHEET STATUS	PRODUCT STATUS	DEFINITIONS
Preliminary specification	Development	This data sheet contains preliminary data. Philips Components 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. Philips Components 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

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