

# DATA SHEET

**TN33/20/11**  
Iron powder toroids

Supersedes data of September 2004

2008 Sep 01

**RING CORES****Effective core parameters**

| SYMBOL        | PARAMETER        | VALUE | UNIT             |
|---------------|------------------|-------|------------------|
| $\Sigma(l/A)$ | core factor (C1) | 1.23  | mm <sup>-1</sup> |
| $V_e$         | effective volume | 5200  | mm <sup>3</sup>  |
| $l_e$         | effective length | 80.0  | mm               |
| $A_e$         | effective area   | 65.0  | mm <sup>2</sup>  |
| m             | mass of core     | ≈35   | g                |

**Coating**

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

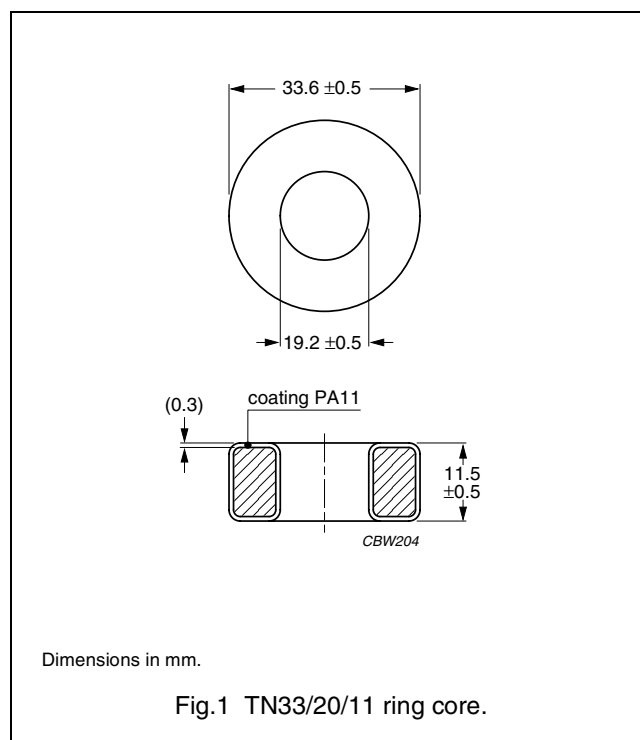
The colour is white.

Maximum operating temperature is 160 °C.

**Isolation voltage**

DC isolation voltage: 1 500 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               | $A_L$<br>(nH) | $\mu_i$ | TYPE NUMBER     |
|---------------------|---------------|---------|-----------------|
| 2P40 <sup>sup</sup> | 41 ±10%       | ≈40     | TN33/20/11-2P40 |
| 2P50 <sup>sup</sup> | 51 ±10%       | ≈50     | TN33/20/11-2P50 |
| 2P65 <sup>sup</sup> | 67 ±10%       | ≈65     | TN33/20/11-2P65 |
| 2P80 <sup>sup</sup> | 82 ±10%       | ≈80     | TN33/20/11-2P80 |
| 2P90 <sup>sup</sup> | 87 +10/-15%   | ≈90     | TN33/20/11-2P90 |

**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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