



Mn-Zn

Large Size Ferrite Cores for High Power

T series

 **REMINDERS FOR USING THESE PRODUCTS**

Please be sure to read this manual thoroughly before using the products.

The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.

When using the products for specific purposes, please first make confirmations in areas such as safety, reliability, and quality.

Please understand that we are not in a position to be held responsible for any damage or the like caused by any use exceeding the range or conditions of this specification sheet or by any use in the specific applications.

- | | |
|---|--|
| (1) Aerospace/Aviation equipment | (8) Public information-processing equipment |
| (2) Transportation equipment (electric trains, ships, etc.) | (9) Military equipment |
| (3) Medical equipment | (10) Electric heating apparatus, burning equipment |
| (4) Power-generation control equipment | (11) Disaster prevention/crime prevention equipment |
| (5) Atomic energy-related equipment | (12) Safety equipment |
| (6) Seabed equipment | (13) Other applications that are not considered general-purpose applications |
| (7) Transportation control equipment | |

When using this product in general-purpose standard applications, you are kindly requested to take into consideration securing protection circuit/equipment or providing backup circuits, etc to ensure higher safety.

Large Size Ferrite Cores for High Power

Product compatible with RoHS directive
Halogen-free

Overview of the T Series

FEATURES

- Large size cores for transformers with large power outputs.
- Can also be used in reactors.

APPLICATION

- Large size industrial equipment, transformers for consumer equipment
- Reactors

PART NUMBER CONSTRUCTION

| PE22 | T | 51 | × | 13 | × | 31 |
|----------|------------|------------------|---|-----------|---|-----------------|
| Material | Core shape | Outside Diameter | | Thickness | | Inside Diameter |
| PE22 | T | 51 | | 13 | | 31 |
| PC40 | | 62 | | 20 | | 39 |
| PE90 | | 72 | | | | 48 |
| | | 80 | | | | 50 |
| | | 96 | | | | 70 |
| | | 104 | | | | 80 |

RANGE OF USE AND STORAGE TEMPERATURE

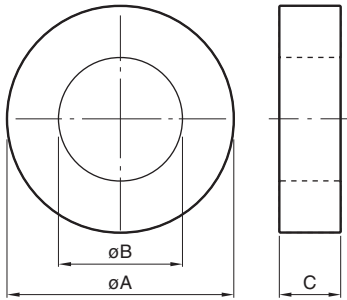
| Temperature range | |
|----------------------------|--------------------------|
| Operating temperature (°C) | Storage temperature (°C) |
| -30 to +105 | -30 to +85 |

- RoHS Directive Compliant Product: See the following for more details related to RoHS Directive compliant products. <http://www.tdk.co.jp/rohs/>
- Halogen-free: Indicates that Cl content is less than 900ppm, Br content is less than 900ppm, and that the total Cl and Br content is less than 1500ppm.

• All specifications are subject to change without notice.

Mn-Zn系 T Cores

SHAPES AND DIMENSIONS



| | | | | | | |
|----------|------------|------------------|---|-----------|---|-----------------|
| PE22 | T | 51 | × | 13 | × | 31 |
| Material | Core shape | Outside Diameter | | Thickness | | Inside Diameter |

| Part No. | Dimensions | | | Effective parameter | | | | | | Electrical characteristics |
|---|------------|----------|-----------|------------------------------|---|--------------------------------|--------------------------------|-----------------------------|-------------------|--|
| | ϕA | ϕB | C | Core factor | | Effective cross-sectional area | Effective magnetic path length | Effective core volume | Weight | AL-value |
| | (mm) | | | C_1 (mm ⁻¹) | $C_2 \times 10^{-2}$ (mm ⁻³) | A_e (mm ²) | ℓ_e (mm) | V_e (mm ³) | (g) | (nH/N ²) 1kHz 0.4A/m 23°C |
| PE22 T51×13×31 PC40 T51×13×31 PE90 T51×13×31 | 51.0±1.0 | 31.0±0.6 | 13.0±0.5 | 0.97084 | 0.76235 | 127 | 124 | 15740 | 80 80 82 | 2330±25% 2980±25% 2850±25% |
| PE22 T62×13×39 PC40 T62×13×39 PE90 T62×13×39 | 62.5±1.2 | 39.0±0.8 | 13.5±0.5 | 0.98689 | 0.63377 | 156 | 154 | 23930 | 121 121 124 | 2290±25% 2930±25% 2800±25% |
| PE22 T72×20×48 PC40 T72×20×48 PE90 T72×20×48 | 72.0±1.5 | 48.0±0.9 | 20.0±0.5 | 0.77481 | 0.32729 | 237 | 183 | 43420 | 217 217 222 | 2920±25% 3730±25% 3570±25% |
| PE22 T80×20×50 PC40 T80×20×50 PE90 T80×20×50 | 80.0±1.6 | 50.0±1.0 | 20.0±0.5 | 0.66842 | 0.22694 | 295 | 197 | 57990 | 294 294 300 | 3380±25% 4320±25% 4140±25% |
| PE22 T96×20×70 PC40 T96×20×70 PE90 T96×20×70 | 96.0±1.9 | 70.0±1.4 | 20.0 ±0.5 | 0.99464 | 0.38574 | 258 | 256 | 66130 | 325 325 332 | 2270±25% 2910±25% 2780±25% |
| PE22 T104×20×80 PC40 T104×20×80 PE90 T104×20×80 | 104.0±2.1 | 80.0±1.6 | 20.0±0.5 | 1.19742 | 0.50179 | 239 | 286 | 68180 | 333 333 340 | 1890±25% 2410±25% 2310±25% |

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