



Mn-Zn

Ferrite Cores for Telecommunication

T series

Caution

**The products in this catalog are not recommended
for new design.**

Please refer to our Web site about replacement information.

 **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.

Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below or for any other use exceeding the range or conditions set forth in this specification sheet.

If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

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

When using these products in general purposes and standard use, it is recommended that protection circuits are used, devices are secured, and backup circuits are kept for increased safety.

Ferrite Cores for Telecommunication

Product compatible with RoHS directive
Halogen-free

Overview of the T Series

FEATURES

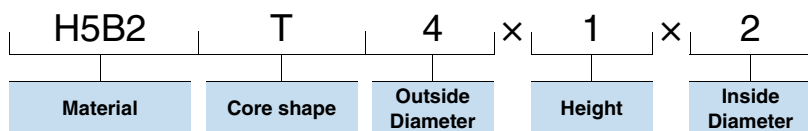
- Select from five high permeability materials of $\mu_i=4000, 5000, 7500, 10000, 15000$ to match the frequency band used.
- Paraxylene coating (Small T Core only) and epoxy coating are available.

APPLICATION

Pulse Transformers, Coils, Current Sensors

PART NUMBER CONSTRUCTION

For general use



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. <https://product.tdk.com/info/en/environment/rohs/index.html>

⚠ Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

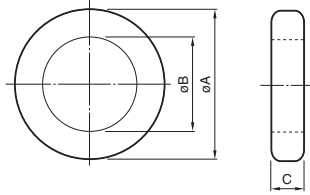
FERRITES



Mn-Zn For general use



SHAPES AND DIMENSIONS



| | | | | |
|----------|------------|------------------|--------|-----------------|
| HP5 | T | 3.05 | 1.27 | 1.27 |
| Material | Core shape | Outside Diameter | Height | Inside Diameter |

If epoxy or paraxyllylene-coated products are desired, please suffix P or E to part No. when ordering.
 Above T10 (outside diameter 10mm min.): Epoxy Coating "E"
 Up to T8 (outside diameter 8mm max.): Paraxyllylene "P"

| Part No. | Effective parameter | | | Effective parameter | | | Electrical characteristics | |
|---|---------------------|------|------|--|--|--|---|--|
| | øA (mm) | øB | C | Core factor C ₁ (mm ⁻¹) | Effective cross-sectional area A _e (mm ²) | Effective magnetic path length l _e (mm) | A _L -value (nH/N ²) | Measuring conditions |
| HP5 T3.05×1.27×1.27 H5B2 T3.05×1.27×1.27 H5C3 T3.05×1.27×1.27 | 3.05 | 1.27 | 1.27 | 5.65 | 1.06 | 5.99 | 1100±20% 1700±25% 3340±30% | 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts |
| HP5 T4×1×2 H5B2 T4×1×2 H5C3 T4×1×2 | 4.00 | 2.00 | 1.00 | 9.06 | 0.961 | 8.71 | 670±20% 1000±25% 2000±30% | 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts |
| HP5 T3.94×1.27×2.23 H5B2 T3.94×1.27×2.23 H5C3 T3.94×1.27×2.23 | 3.94 | 2.23 | 1.27 | 8.69 | 1.06 | 9.19 | 720±20% 1080±25% 2170±30% | 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts |
| HP5 T4.83×1.27×2.29 H5B2 T4.83×1.27×2.29 H5C3 T4.83×1.27×2.29 | 4.83 | 2.29 | 1.27 | 6.63 | 1.54 | 10.2 | 950±20% 1400±25% 2840±30% | 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts |
| HP5 T6×1.5×3 H5B2 T6×1.5×3 H5C3 T6×1.5×3 | 6.00 | 3.00 | 1.50 | 6.04 | 2.16 | 13.1 | 1000±20% 1500±25% 3000±30% | 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts |
| HP5 T5.84×1.52×3.05 H5B2 T5.84×1.52×3.05 H5C3 T5.84×1.52×3.05 | 5.84 | 3.05 | 1.52 | 6.34 | 2.05 | 13.0 | 990±20% 1480±25% 2960±30% | 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts |
| HP5 T8×2×4 H5B2 T8×2×4 H5C3 T8×2×4 | 8.00 | 4.00 | 2.00 | 4.53 | 3.84 | 17.4 | 1330±20% 2000±25% 4000±30% | 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts |
| HP5 T10×2.5×5 H5B2 T10×2.5×5 H5C3 T10×2.5×5 | 10.0 | 5.00 | 2.50 | 3.63 | 6.01 | 21.8 | 1670±20% 2500±25% 5000±30% | 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts 10kHz, 10mV, 5Ts |
| H5A T12×3×6 H5C2 T12×3×6 | 12.0 | 6.00 | 3.00 | 3.02 | 8.65 | 26.1 | 1400±25% 3600±25% | 50kHz, 10mV, 10Ts 10kHz, 10mV, 5Ts |
| H5A T14×3.5×7 H5C2 T14×3.5×7 | 14.0 | 7.00 | 3.50 | 2.59 | 11.8 | 30.5 | 1650±25% 4200±25% | 50kHz, 10mV, 10Ts 10kHz, 10mV, 5Ts |
| H5A T20×5×10 H5C2 T20×5×10 | 20.0 | 10.0 | 5.00 | 1.81 | 24.0 | 43.6 | 2350±25% 6000±30% | 50kHz, 10mV, 10Ts 10kHz, 10mV, 5Ts |
| H5A T20×7.5×14.5 H5C2 T20×7.5×14.5 | 20.0 | 14.5 | 7.50 | 2.61 | 20.4 | 53.3 | 1800±25% 4100±30% | 50kHz, 10mV, 10Ts 10kHz, 10mV, 5Ts |
| H5C2 T28×13×16 | 28.0 | 16.0 | 13.0 | 0.864 | 76.0 | 65.6 | 14000±30% | 10kHz, 10mV, 5Ts |
| H5C2 T31×8×19 | 31.0 | 19.0 | 8.00 | 1.60 | 47.1 | 75.5 | 7700±30% | 10kHz, 10mV, 5Ts |
| H5C2 T38×14×22 | 38.0 | 22.0 | 14.0 | 0.821 | 109 | 89.7 | 13160±30% | 10kHz, 10mV, 5Ts |
| H5C2 T44.5×13×30 | 44.5 | 30.0 | 13.0 | 1.23 | 93.0 | 114 | 10000±30% | 10kHz, 10mV, 5Ts |

- Can be coated with epoxy or paraxyllylene.
- Insulation withstanding voltage of coating product: DC.1000V min. for 1 second.