Mn-Zn
Ferrite Cores for Telecommunication

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

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.
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

<table>
<thead>
<tr>
<th>Material</th>
<th>Core shape</th>
<th>Outside Diameter</th>
<th>Height</th>
<th>Inside Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5B2</td>
<td>T</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

- **RANGE OF USE AND STORAGE TEMPERATURE**

<table>
<thead>
<tr>
<th>Temperature range</th>
<th>Operating temperature ($^\circ$C)</th>
<th>Storage temperature ($^\circ$C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>–30 to +105</td>
<td>–30 to +85</td>
</tr>
</tbody>
</table>


⚠️ 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

![Diagram of Mn-Zn ferrite cores]

- Can be coated with epoxy or paraxylylene.
- Insulation withstanding voltage of coating product: DC.1000V min. for 1 second.
- Effective parameter
  - $\Phi_A$  
  - $\Phi_B$  
  - $C$  
- Effective parameter
  - Core factor $C_1$ (mm$^{-1}$)  
  - Effective cross-sectional area $A_e$ (mm$^2$)  
  - Effective magnetic path length $\mu_e$ (mm)  
- Electrical characteristics
  - $A_e$-value (nH/N$^2$)

### Material | Core shape | Outside Diameter | Height | Inside Diameter
--- | --- | --- | --- | ---
HP5 | T | 3.05 | 1.27 | 1.27
HP5 | T | 4.00 | 2.00 | 1.00
HP5 | T | 3.94 | 2.23 | 1.27
HP5 | T | 4.83 | 2.29 | 1.27
HP5 | T | 6.00 | 3.00 | 1.50
HP5 | T | 5.84 | 3.05 | 1.52
HP5 | T | 8.00 | 4.00 | 2.00
HP5 | T | 10.0 | 5.00 | 2.50
HP5 | T | 12.0 | 6.00 | 3.00
HP5 | T | 14.0 | 7.00 | 3.50
HP5 | T | 20.0 | 10.0 | 5.00
HP5 | T | 20.0 | 14.5 | 7.50
HP5 | T | 28.0 | 16.0 | 13.0
HP5 | T | 31.0 | 19.0 | 8.00
HP5 | T | 38.0 | 22.0 | 14.0
HP5 | T | 44.5 | 30.0 | 13.0

If epoxy or paraxylylene-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.): Paraxylylene “P”

---

---

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.

---

20190220 / ferrite_mz_tl_t_en