

JIS

JAPANESE INDUSTRIAL STANDARD

General rules of high frequency coils and intermediate frequency transformers for electronic equipment

JIS C 5320—1994

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## JAPANESE INDUSTRIAL STANDARD

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## General rules of high frequency coils and intermediate frequency transformers for electronic equipment C 5320-1994

1. Scope This Japanese Industrial Standard specifies the criteria for determination of designation of type, ratings, construction, dimensions and the like of the following products. They are high frequency variable coils and fixed coils (hereafter referred to as "high frequency coils"), and intermediate frequency transformers (hereafter "IFT"), both of which are used mainly for radio and television receivers and other electronic equipment.

Remarks: The standards cited in this Standard are as follows.

JIS C 0801 Color code for electronic parts

JIS C 5002 Environmental requirements for electronic components

JIS C 5321 Methods of test for high frequency inductors and intermediate frequency transformers for electronic equipment

JIS C 5602 Glossary of passive components for electronic equipment

2. Definitions For the purposes of this Standard, the following definition apply. Other terms and the definitions are given in JIS C 5602.

variable range of inductance A range of inductance which can be changed by adjusting a variable mechanism.

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3. Designation of type

3.1 Composition of designation of type      The designation of type shall be composed as follows.

|                                              |                        |                                       |                                                                                                                                                                                         |                                                                                                                                                                                    |                                        |
|----------------------------------------------|------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Symbol denoting high frequency coil and IFT. | Symbol denoting class. | Symbol denoting dimensions and shape. | Symbol denoting construction of magnetic core.<br>3.2.4<br><br>However, in the case of two-terminal type high frequency coil, symbol denoting terminal drawing out direction and shape. | Symbol denoting rated frequency.<br>3.2.5<br><br>However, in the case of two-terminal type high frequency coil, symbol denoting nominal inductance and its tolerance.<br><br>3.2.7 | Symbol denoting other necessary items. |
| 3.2.1                                        | 3.2.2                  | 3.2.3                                 | 3.2.6                                                                                                                                                                                   | 3.2.8                                                                                                                                                                              | 3.2.9                                  |

Example:

|                                             |   |    |        |   |      |
|---------------------------------------------|---|----|--------|---|------|
| 7 mm square IFT                             | L | IF | 07S    | V | A1   |
| Multi-terminal high frequency variable coil | L | VM | 12T    | J | M2   |
| Two-terminal high frequency fixed coil      | L | FD | 3216dX | D | 101K |

3.2 Symbol

3.2.1 High frequency coil and IFT      The symbol denoting the high frequency coil and IFT shall be L.

3.2.2 Classification The symbols denoting classification shall be two English capital letters as given in Table 1.

Table 1. Symbols denoting classification

| Symbol | Classification                              |
|--------|---------------------------------------------|
| VD     | Two-terminal high frequency variable coil   |
| VM     | Multi-terminal high frequency variable coil |
| FD     | Two-terminal high frequency fixed coil      |
| FM     | Multi-terminal high frequency fixed coil    |
| IF     | IFT                                         |

3.2.3 Dimensions and shape The symbol denoting dimensions shall be two numeric characters, with mm as unit.

The symbol denoting shape shall be one English capital letter according to the shape of the base and the arrangement of terminals. Both are given in Table 2. In the case of the shapes X and Z, however, the dimensional symbols shall be four numeric characters.

In the case of adopting 1/10 mm as unit, a letter (d) shall follow the dimensional symbol.

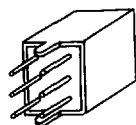
Example:   05d ..... 0.5 mm  
              05 ..... 5 mm  
              50 ..... 50 mm  
              5010d ..... 5 × 1 mm  
              5010 ..... 50 × 10 mm

Table 2. Dimensions and shape

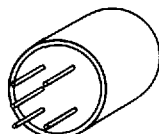
| Symbol                                                                              |       | Dimensions                                                                                                                                                              | Shape         |                          | Remarks                                                      |
|-------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------------|--------------------------------------------------------------|
| Dimensions                                                                          | Shape |                                                                                                                                                                         | Shape of base | Arrangement of terminals |                                                              |
|    | S     | Fill in with the length of one side of base.                                                                                                                            | Square        | Square shape             | Informative reference Fig. 1                                 |
|    | T     | Fill in with the diameter of base.                                                                                                                                      | Circle        | Square shape             | Informative reference Fig. 2                                 |
|    | X     | Fill the first two squares with the nominal major side dimension of base, and the last two squares with the nominal minor side dimension of base.                       | Rectangle     | Square shape             | Informative reference Fig. 3<br>Informative reference Fig. 4 |
|    | A     | Fill in with the diameter of base.                                                                                                                                      | Circle        | 60 degree division       | Informative reference Fig. 5                                 |
|    | E     |                                                                                                                                                                         |               | 45 degree division       | Informative reference Fig. 6                                 |
|    | F     |                                                                                                                                                                         |               | 36 degree division       | Informative reference Fig. 7                                 |
|  | Z     | Denote by the external shape of body. Fill the first two squares with the nominal major side dimension, and the last two squares with the nominal minor side dimension. | Other shapes  |                          |                                                              |

Remarks: Squares in the column "Symbols, Dimensions" shall be filled with numeric characters.

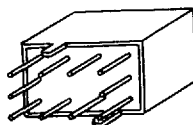
Informative  
reference Fig. 1



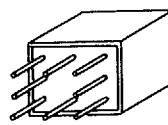
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reference Fig. 2



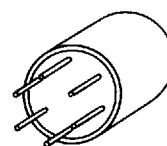
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reference Fig. 3



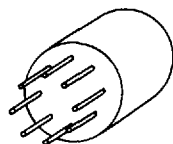
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reference Fig. 4



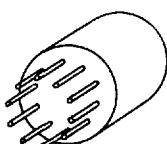
Informative  
reference Fig. 5



Informative  
reference Fig. 6



Informative  
reference Fig. 7



3.2.4 Construction of magnetic core  
shall be given in Table 3.

Symbols denoting construction of magnetic