

JIS

JAPANESE INDUSTRIAL STANDARD

**Intermediate frequency
transformers for broadcast
receiver**

JIS C 6421—1994

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In the event of any doubt arising,
the original Standard in Japanese is to be final authority.

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Intermediate frequency transformers
for broadcast receiver

C 6421-1994

1. **Scope** This Japanese Industrial Standard specifies intermediate frequency transformers to be used for such broadcast receivers as radio and television based on JIS C 5320 (hereafter referred to as "IFT").

Remarks: The following standards are cited in this Standard:

- JIS C 5320 General rules of high frequency inductors and intermediate frequency transformers for electronic equipment
- 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
- JIS Z 9015 Sampling inspection procedures and tables by attributes with severity adjustment (receiving inspection where a consumer can select suppliers)

2. **Definitions** The principal definitions used in this Standard are based on JIS C 5320, JIS C 5321 and JIS C 5602.

3. Type designation

3.1 Structure of type designation The type designation shall be arranged as follows.

Symbol denoting IFT	Symbol denoting dimensions and shape	Symbol denoting construction of magnetic core	Symbol denoting rated frequency	Symbol denoting category temperature range	Symbol denoting termination connection
3.2.1	3.2.2	3.2.3	3.2.4	3.2.5	3.2.6

Example: LIF 10S V A2 M 1BB

3.2 Symbols

3.2.1 IFT The symbol denoting IFT shall be LIF.

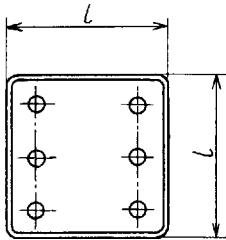
3.2.2 Dimensions and shape The symbols denoting dimensions and shape shall be as shown in Table 1 and Fig. 1, where 2 numerals are used for dimensions, and one English capital letter S is used for the shape of bottom face and the termination arrangement.

Here S indicates square shaped base and rectangular termination arrangement.

Table 1. Dimension and shape
Unit: mm

Symbol	<i>l</i> (max.)
05S	5.9
07S	7.9
10S	10.9

Fig. 1. Dimension of bottom face



3.2.3 Construction of magnetic core The symbols denoting construction of mag-
netic core shall consist of one English capital letter as given in Table 2.

Table 2. Construction of magnetic core

Symbol	Construction of magnetic core	Informative reference drawing (examples are shown)
T	Screw type magnetic core	(Sectional view)
C	Cup type magnetic core	(Sectional view)
N	Cup type magnetic core with round bar	(Sectional view)
J	Screw type magnetic core and cup type magnetic core	(Sectional view)
V	Drum type magnetic core and cup type magnetic core	(Sectional view)

3.2.4 Rated frequency The symbols denoting rated frequency shall be as given in
Table 3, where two letters, i.e. one English capital letter and one numeral are used.

Table 3. Rated frequency

Symbol	Rated frequency	Remarks
A1	260 to 263 kHz	For AM radio intermediate frequency circuit
A2	448 to 452 kHz	For AM radio intermediate frequency circuit
A3	453 to 457 kHz	For AM radio intermediate frequency circuit
A4	458 to 462 kHz	For AM radio intermediate frequency circuit
A5	466 to 470 kHz	For AM radio intermediate frequency circuit
A9	—	For AM radio intermediate frequency circuit other than A1 to A5
C1	3.58 MHz	For television color signal transmitting circuit
C9	—	For television color signal transmitting circuit other than C1
S1	4.5 MHz	For television voice intermediate frequency circuit
S9	—	For television voice intermediate frequency circuit other than S1
F1	10.64 to 10.76 MHz	For FM radio intermediate frequency circuit
F9	—	For FM radio intermediate frequency circuit other than F1
V1	54.25 MHz	For television image intermediate frequency circuit (for voice transmitting circuit)
V2	58.75 MHz	For television image intermediate frequency circuit (for image transmitting circuit)
V3	60.25 MHz	For television image intermediate frequency circuit (for adjacent channel voice transmitting circuit)
V4	41.25 MHz	For television image intermediate frequency circuit (for voice transmitting circuit)
V5	45.75 MHz	For television image intermediate frequency circuit (for image transmitting circuit)
V6	47.25 MHz	For television image intermediate frequency circuit (for adjacent channel voice transmitting circuit)
V9	—	For television image intermediate frequency circuit other than V1 to V6

3.2.5 Category temperature range The symbols denoting category temperature range shall consist of one English capital letter as shown in Table 4.

Table 4. Category temperature range of IFT
Unit: °C

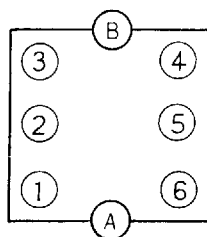
Symbol	Category temperature range
M	– 10 to + 70
J	– 25 to + 85
G	– 40 to + 85

3.2.6 Termination connection The symbols for termination connection shall consist of three letters, i.e. one numeral and two English capital letters, the first two letters are for termination connection of winding and the remaining one letter is for termination connection of capacitor.

The terminations shall, as shown in Fig. 2, be numbered consecutively starting from 1 clockwise viewed from the bottom face. If some terminations are removed, the numbers of remaining terminations shall not be changed.

Case terminations shall be marked A, B clockwise viewed from the bottom face starting from the one close to termination number 1.

Fig. 2. Termination number (bottom face drawing)



- (1) Winding termination connection The symbols for winding termination connection shall be the one stated in the above of each termination diagram in Table 5 (Example: 1A, 2A, ...).
- (2) Capacitor termination connection The symbols for capacitor termination connection shall be as shown in Table 6. It is preferable that the capacitor is connected to terminations 1 and 3 or 3 and 6. If the construction of apparatus does not allow connection with the said terminations, the capacitor shall be connected to terminations 1 and 6.