

MILITARY SPECIFICATION

TRANSFORMERS; INTERMEDIATE FREQUENCY, RADIO FREQUENCY  
AND DISCRIMINATOR, GENERAL SPECIFICATION FOR

This amendment forms a part of Military Specification MIL-T-55631 dated 17 April 1972, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

Identification block, delete and substitute:

" MIL-T-55631  
17 April 1972  
SUPERSEDING  
MIL-C-15305C  
IN-PART  
18 October 1962  
(see 6.5)"

PAGES 1 AND 2

\* 2.1 and 2.2, delete and substitute the following:

"2.1 Government specifications and standards. Unless otherwise specified, the following specifications and standards, of the issue listed in that issue of the Department of Defense Index of Specifications and Standards specified in the solicitation, form a part of this specification to the extent specified herein."

SPECIFICATIONS

FEDERAL

J-W-1177	- Wire, Magnet, Electrical.
QQ-S-571	- Solder, Tin Alloy: Tin-Lead Alloy; and Lead Alloy.
QQ-S-781	- Strapping, Steel, and Seals.
PPP-B-566	- Boxes, Folding, Paperboard.
PPP-B-585	- Boxes, Wood, Wirebound.
PPP-B-601	- Boxes, Wood, Cleated-Plywood.
PPP-B-621	- Boxes, Wood, Nailed and Lock-Corner.
PPP-B-636	- Boxes, Shipping, Fiberboard.
PPP-B-676	- Boxes, Setup.

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MIL-P-116	- Preservation, Methods of.
MIL-P-14256	- Flux, Soldering, Liquid (Rosin Base).

STANDARDS

FEDERAL

FED-STD-H28	- Screw-Thread Standards for Federal Services.
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MILITARY

MIL-STD-105	- Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-129	- Marking for Shipment and Storage.
MIL-STD-147	- Palletized Unit Loads.
MIL-STD-202	- Test Methods for Electronic and Electrical Component Parts.
MIL-STD-275	- Printed Wiring for Electronic Equipment.
MIL-STD-794	- Parts and Equipment, Procedures for Packaging and Packing.
MIL-STD-810	- Environmental Test Methods.
MIL-STD-1276	- Leads for Electronic Component Parts.
MIL-STD-1285	- Marking of Electrical and Electronic Parts.
MIL-STD-45662	- Calibration Systems Requirements.

(Copies of specifications, standards, handbooks, drawings, and publications required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

"2.2 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein, the text of this specification shall take precedence."

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3.3.2, delete and substitute:

"3.3.2 Solder and soldering flux. Solder and soldering flux, when used, shall be in accordance with QQ-S-571 and MIL-F-14256 respectively."

- \* 3.3.3, delete "MIL-W-583" and substitute "J-W-1177."
- \* 3.4.1, line 2: Delete "Handbook H28" and substitute "FED-STD-H28."
- \* 3.4.3.2, line 2: Delete "type C" and substitute "composition C1 and final finish 4".

PAGE 5

3.12, delete and substitute:

"3.12 Solderability. When transformers are tested as specified in 4.7.9, they shall meet the applicable criteria for terminal evaluation in the test method."

3.16, after "Resistance to soldering heat," delete "(when applicable see 3.1 and 6.1)."

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3.28, delete and substitute:

"3.28 Workmanship. Transformers shall be processed in such a manner as to be uniform in quality and shall meet the requirements of 3.3, 3.4, and 3.27, as applicable, and shall be free of defects that will affect life, serviceability or appearance."

- \* 4.1.1, line 5: Delete "MIL-C-45662" and substitute "MIL-STD-45662."
- \* TABLE II, Applicable document column, delete and substitute as follows:

<u>Delete</u>	<u>Substitute</u>
"MIL-STD-454	QQ-S-571, MIL-F-14256
MIL-W-583	J-W-1177"

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Table III, Group II: After "Solderability," delete "(when applicable)."

Table III, Group IV: After "Resistance to soldering heat," delete "(when applicable)."

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Table VI, Subgroup 1: After "Solderability," delete "(when applicable)."

Table VI, Subgroup 3: After "Resistance to soldering heat," delete "(when applicable)."

PAGE 12

\* 4.6.3, delete and substitute the following:

"4.6.3 Inspection of packaging. The sampling and inspection of the preservation and interior package marking shall be in accordance with the group A and B quality conformance inspection requirements of MIL-P-116. The sampling and inspection of the packing and marking for shipment and storage shall be in accordance with the quality assurance provisions of the applicable container specification and the marking requirements of MIL-STD-129."

PAGE 15

4.7.6.3, after paragraph title add the following in parenthesis, "(when specified, for ferrite-core units only)."

4.7.6.3, delete last two sentences and substitute the following:

"The inductance of the transformer under test shall be determined and recorded with zero dc current in the transformer. The specified value of incremental current shall be applied through the transformer and this inductance measurement recorded. The change in inductance between the two values shall be less than five percent."

PAGE 19

4.7.8, third sentence, delete and substitute the following: "The tuning core shall be rotated for eight cycles (from maximum core extension to minimum and return to maximum position is one complete cycle) while not exceeding the maximum or minimum torque specified (see 3.1 and 6.1)."

4.7.9, delete and substitute:

"4.7.9 Solderability (see 3.12). Transformers shall be tested in accordance with 4.7.9.1 or 4.7.9.2 as applicable (see 3.1 and 6.1). The method in 4.7.9.1 is preferred and shall be specified whenever practicable; otherwise the method in 4.7.9.2 shall be used."

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4.7.13, after "Resistance to soldering heat," delete "(when applicable, see 3.1 and 6.1)."

4.7.13.2, after paragraph title add the following in parenthesis: "(not required when performed under 4.7.9.1)."

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4.7.17.1(a), delete and substitute:

"(a) Method of mounting - Transformers shall be securely fastened by their normal mounting means (see 3.1 and 6.1)."

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AMENDMENT 2

PAGES 25 AND 26

Section 5, delete in its entirety and substitute a new Section 5 as printed on pages 5 and 6 of this amendment.

PAGE 27

Add new paragraph as follows:

"6.5 Supersession data. The intermediate and radio-frequency transformers formerly covered by MIL-C-15305C are now covered by this specification."

The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

Custodians:

Army - ER  
Navy - EC  
Air Force - 85

Preparing activity:  
Army - ER

(Project 5950-0605)

Review activities:

Army - MI  
Navy - SH, OS  
Air Force - 11, 17, 99  
DLA - ES

User activities:

Army - AR, WC, ME  
Navy - MC, AS  
Air Force - 19

Agent:

DLA - ES

"5. PACKAGING

"5.1 Preservation. Preservation shall be level A or C, as specified (see 6.1).

"5.1.1 Level A.

"5.1.1.1 Cleaning. Transformers shall be cleaned in accordance with MIL-P-116, process C-1.

"5.1.1.2 Drying. Transformers shall be dried in accordance with MIL-P-116.

"5.1.1.3 Preservative application. Preservatives shall not be used.

"5.1.1.4 Unit packs. Each transformer shall be individually unit packed in accordance with the methods of MIL-P-116 specified herein insuring compliance with the applicable requirements of that specification.

"5.1.1.4.1 Hermetically sealed transformers. Hermetically sealed transformers shall be unit packed in accordance with method III.

"5.1.1.4.2 Nonhermetically sealed transformers. Nonhermetically sealed transformers shall be preserved in accordance with submethod IA-8. Each unit pack exceeding 15 cubic inches shall be placed in a supplementary container conforming to PPP-B-566 or PPP-B-676.

"5.1.1.5 Intermediate packs. Transformers, unit packed in bags or envelopes as specified in 5.1.1.4, shall be placed in intermediate containers conforming to PPP-B-566 or PPP-B-676 or PPP-B-636. Intermediate containers shall be uniform in size, shape and quantities, shall be of minimum tare and cube and shall contain multiples of five unit packs, not to exceed 100 unit packs. No intermediate packs are required when the total quantity shipped to a single destination is less than 100 unit packs or when supplementary containers are used.

"5.1.2 Level C. The level C preservation for transformers shall conform to the MIL-STD-794 requirements for this level.

"5.2 Packing. Packing shall be level A, B or C, as specified (see 6.1).

"5.2.1 Level A. The packaged transformers shall be packed in fiberboard containers conforming to PPP-B-636, class weather resistant, style optional, special requirements. The requirements for box closure, waterproofing and reinforcing shall be in accordance with method V of the PPP-B-636 appendix.

"5.2.2 Level B. The packaged transformers shall be packed in fiberboard containers conforming to PPP-B-636, class domestic, style optional, special requirements. Closures shall be in accordance with the appendix thereto.

"5.2.3 Level C. The level C packing for transformers shall conform to the the MIL-STD-794 requirements for this level.

"5.3 Marking. In addition to any special or other identification marking required by the contract (see 6.1), each unit pack, intermediate, supplementary and exterior container shall be marked in accordance with MIL-STD-129.

"5.4 General.

"5.4.1 Exterior containers. Exterior containers (see 5.2.1, 5.2.2 and 5.2.3) shall be of a minimum tare and cube consistent with the protection required and shall contain equal quantities of identical stock numbered items to the greatest extent practicable.

"5.4.2 Packaging inspection. The inspection of these packaging requirements shall be in accordance with 4.6.3.

"5.4.3 Army acquisitions

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AMENDMENT 2

"5.4.3.1 Level A intermediate packs. All unit, supplementary and intermediate containers shall be either weather (or water) resistant or overwrapped with waterproof barrier materials (see 5.1.1.4, 5.1.1.4.2 and 5.1.1.5).

"5.4.3.2 Level A and Level B packing. For level A packing, the fiberboard containers shall not be banded but shall be placed in a close fitting box conforming to PPP-B-601, overseas type; PPP-B-621, class 2, style 4 or PPP-B-585, class 3, style 2 or 3. Closure and strapping shall be in accordance with applicable container specification except that metal strapping shall conform to QQ-S-781, type I, finish A. When the gross weight exceeds 200 pounds or the container length and width is 48 x 24 inches or more and the weight exceeds 100 pounds, 3 x 4 inch skids (laid flat) shall be applied in accordance with the requirements of the container specification. If not described in the container specification, the skids shall be applied in a manner which will adequately support the item and facilitate the use of material handling equipment. For level B packing, fiberboard boxes shall be weather resistant as specified in level A and the containers shall be banded (see 5.2.1 and 5.2.2)."