

NOTICE OF CHANGE

METRIC

MIL-STD-1580A
NOTICE 1
18 August 2000

DEPARTMENT OF DEFENSE

TEST METHOD STANDARD
DESTRUCTIVE PHYSICAL ANALYSIS FOR ELECTRONIC,
ELECTROMAGNETIC, AND ELECTROMECHANICAL PARTS

TO ALL HOLDERS OF MIL-STD-1580A:

1. THE FOLLOWING PAGES OF MIL-STD-1580A HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

<u>NEW PAGE</u>	<u>DATE</u>	<u>SUPERSEDED PAGE</u>	<u>DATE</u>
6	22 December 1989	6	18 August 2000
7	22 December 1989	7	18 August 2000
85	22 December 1989	85	18 August 2000

2. RETAIN THIS NOTICE PAGE AND INSERT BEFORE THE TABLE OF CONTENTS.

3. Holders of MIL-STD-1580A will verify that the changes indicated above have been entered. This notice page will be retained as a check sheet. This issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the standard is completely revised or cancelled.

4. The margins of this notice are marked with asterisks to indicate where changes 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 issue.

Custodians:
Air Force – 19

Preparing activity:
DLA - CC

(Project 1820-9903)

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- MIL-W-81044 Wire, Electric, Crosslinked Polyalkene, Crosslinked Alkane-imide Polymer, or Polyarylene Insulated, Copper or Copper Alloy, General Specification for
- MIL-DTL-81381 Wire, Electric, Polyimide-Insulated, Copper and Copper Alloy, General Specification for
- MIL-PRF-83401 Resistors, Networks, Fixed, Film Copper or Copper Alloy, General Specification for
- MIL-PRF-83421 Capacitor, Fixed, Supermetallized, Plastic Film Dielectric, (DC, AC, or DC and AC), Hermetically Sealed in Metal Cases, ER, General Specification for
- MIL-C-83500 Capacitors, Fixed, Electrolytic (Non-Solid Electrolyte), Tantalum Anode and Cathode, Style CRL, General Specification for
- * MIL-PRF-87164 Capacitor, Fixed, Mica Dielectric, High Reliability, Style CMS, General Specification for
- MIL-PRF-87217 Capacitors, Fixed, Supermetallized Plastic Film Dielectric, Direct Current for Low Energy, High Impedance Applications, Hermetically Sealed in Metal Cases, Established Reliability, General Specification for

STANDARDS

Federal

- FED-STD-H28 Screw Thread Standard for Federal Services
- FED-STD-209 Federal Standard Clean Room and Work Station Requirements, Controlled Environment

Military

- MIL-STD-202 Military Standard. Test Methods for Electronic and Electrical Component Parts
- MIL-STD-750 Military Standard. Test Methods for Semiconductor Devices

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MIL-STD-883 Test Methods and Procedures for Microelectronics

MIL-STD-981 Design, manufacturing, and Quality Standards for Custom
Electromagnetic Devices for Space Applications

MIL-STD-1285 Marking of Electric and Electronic Parts

OTHER

NATIONAL BUREAU OF STANDARDS

NBS Special Notes on SEM Examination of
Publication 400-35 Microelectronic Devices

AMERICAN NATIONAL STANDARDS

J-STD-004 - Requirements for Soldering Fluxes.

J-STD-006 - Requirements for Electronic Grade Solder Alloys and Fluxed and
Non-Fluxed Solder Solders for Electronic Soldering Applications.

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2.2 ORDER OF PRECEDENCE

In the event of a conflict between the text of this standard and the references cited herein, the text of this standard shall take precedence. However, nothing in this standard shall supersede applicable laws and regulations unless a specific exemption has been obtained.

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- h. Charred, crushed, discolored, or damaged wire insulation.
- i. Repaired or spliced coil wire.
- j. Wire-to-lead termination connections that do not show a sufficient Stress relief loop.
- k. Cold solder joints, or solder joints with no fillet around wire or termination.
- l. No evidence of weld tip indentation in weld joints.
- m. Cracks in welded joints.
- n. Loose or splattered weld.
- * o. Lack of three (3) full nonoverlapping wraps of wire at each post termination.
- p. Stranded conductor wire at terminations that does not show pretinning or that shows large globules of solder that obscure the wire contour, or wire swelling due to excess wicking.
- q. Solder that is not chemically Type Sn 60, Sn 62, or Sn 63 in accordance with J-STD-004 or J-STD-006 or (for wire gauges smaller than size No. 38) Sn 10 for Class S devices.
- r. Coils or other electronic components that show evidence of overheating.
- s. Fractures, cracks, or pinholes in solder joint.
- t. Solder joints with sharp tips or peaks or with a protruding, bare wire-end or bare strands of a conductor.
- u. Foreign or extraneous matter embedded in or adherent to wire joints, between windings, or cores, or thin impregnation.

10.2 MAGNETIC DEVICES, RF COILS

Typical devices are shown in Figure 10-3.