MIL-STD-1285
15 October 1969

SUPERSEDING
MIL-STD-174A
21 July 1960,
MIL-STD-221D
2 December 1963,
MIL-STD-456A
24 August 1964

MILITARY STANDARD

MARKING OF ELECTRICAL AND ELECTRONIC PARTS

FSC 59GP

MIL-STD-1285
NOTICE 2
21 May 1971

MILITARY STANDARD

MARKING OF ELECTRICAL AND ELECTRONIC PARTS

TO ALL HOLDERS OF MIL-STD-1285:

1. THE FOLLOWING CHANGES ARE TO BE MADE TO MIL-STD-1285:

   (a) Page revisions. Insert the following revised pages:

NEW PAGE AND DATE	SUPERSEDED PAGE AND DATE
2 - 21 May 1971	2 - 15 October 1969
4 - 21 May 1971	4 - 15 October 1969

   NOTE: The margins of these revised pages are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) have been made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations.

   (b) Pen and ink changes: Add "8 October 1970" in outside margin of pages 11 and 12, under "FSC SECTION 5905".

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

3. THE FOLLOWING IS A CUMULATIVE LIST OF EARLIER CHANGES:

NEW PAGE AND DATE	SUPERSEDED PAGE AND DATE
11 - 8 October 1970	11 - 15 October 1969
12 - 8 October 1970	12 - 15 October 1969

4. HOLDERS OF MIL-STD-1285 WILL VERIFY THAT PAGE CHANGES INDICATED ABOVE HAVE BEEN ENTERED AND WILL DESTROY THE PREVIOUS NOTICE (NOTICE PAGE ONLY). THE LATEST NOTICE (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 MILITARY STANDARD IS COMPLETELY REVISED OR CANCELED.

Preparing activity:
Army - EL

(Project MISC-0757)

MIL-STD-1285
NOTICE 1
8 October 1970

MILITARY STANDARD

MARKING OF ELECTRICAL AND ELECTRONIC PARTS

TO ALL HOLDERS OF MIL-STD-1285:

1. THE FOLLOWING PAGES OF MIL-STD-1285 HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

NEW PAGE	DATE	SUPERSEDED PAGE	DATE
11	- - -	11	15 October 1969
12	- - -	12	15 October 1969

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

3. HOLDERS OF MIL-STD-1285 WILL VERIFY THAT PAGE CHANGES INDICATED ABOVE HAVE BEEN ENTERED. THIS NOTICE (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 MILITARY STANDARD IS COMPLETELY REVISED OR CANCELED.

Preparing activity:
Army - EL

(Project 5905-0726)

FSC 5905

MIL-STD-1285
15 October 1969

DEPARTMENT OF DEFENSE
Washington, D.C. 20301

Marking of Electrical and Electronic Parts

MIL-STD-1285

1. This Military Standard is mandatory for use by all Departments and Agencies of the Department of Defense.

2. Recommended corrections, additions, or deletions should be addressed to U.S. Army Electronics Command, Attn: AMSEL-TD-SS, Fort Monmouth, New Jersey 07703.

2

FOREWORD

This Military Standard provides uniform marking requirements for selected electrical and electronic parts. The requirements that are common to all parts are contained in Sections 1 through 5. Individual requirements applicable to specific parts are contained in FSC sections of this standard; these sections are numbered to identify the applicable Federal Supply Class (e.g., FSC Section 5905 - Resistors).

This standard need not be applied to existing procurement documents; however, it should be considered for adoption whenever such documents are revised.

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FIGURES

TABLES

FSC SECTIONS

1. SCOPE

1.1 Scope. This standard provides requirements for the marking of selected electrical and electronic parts (see 6.1). Included in this standard are requirements for functional marking (see 3.1(a)), and part identification marking (see 3.1(b)) with related unit package marking.

1.2 Purpose. This standard is designed to serve the following purposes:

(a) To provide requirements for the physical marking of the part and the unit package (see section 4).

(b) To provide details and procedures for specifying marking requirements in the procurement document (see 3.1(c)) (see section 5).

2. REFERENCED DOCUMENTS

2.1 The latest issues of the following documents form a part of this standard to the extent specified herein.

PUBLICATIONS

Department of Defense

Handbook H4-1 - Federal Supply Code for Manufacturers.
NAVSHIPS 0967-190-4010 - Manufacturer Designating Symbols.

(Application for copies should be addressed to the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.)

American National Standards

* ANSI C83.1 - Standard Colors for Color Identification and Coding.

(Application for copies should be addressed to the American National Standards Institute, 1430 Broadway, New York, N.Y. 10018, or to the Electronic Industries Association, 2001 Eye Street, N.W., Washington, D.C. 20006.)

ANSI Y10.19 - Letter Symbols for Units Used in Electrical Science and Electrical Engineering.
ANSI Y32.2 - Graphic Symbols for Electrical and Electronics Diagrams.

(Application for copies should be addressed to the American National Standards Institute, 1430 Broadway, New York, N.Y. 10018.)

3. DEFINITIONS

3.1 **Marking terms.** For the purpose of this standard, the following terms shall apply:

(a) **Functional marking.** The symbols, letters, numbers, and similar markings applied to indicate polarity, terminals, etc.

(b) **Part identification marking.** The typographical-marking (method I) or color-coding (method II) of parts.

(c) **Procurement document.** The specification or engineering drawing (excluding specification control) used for procurement purposes.

4. GENERAL REQUIREMENTS

4.1 Marking process. Functional and part identification marking shall be applied in the location specified in the procurement document using any marking process which will not adversely affect the functioning of the finished part. In addition:

(a) Marking shall remain legible following completion of all inspections specified in the procurement document. (See 6.2.)

(b) Marking materials shall be nonfading.

(c) Paper labels shall not be used.

4.2 Functional marking. Each part shall be marked as specified in 5.1.

4.3 Part identification marking. Each part shall be marked in accordance with 4.3.1 or 4.3.2, as specified in the procurement document. Any other markings that may be applied to the part shall not interfere with, obscure, or confuse those specified herein.

4.3.1 Method I (typographical-marking). The requirements specified in 5.2 shall be marked using capital letters and Arabic numbers. Sans-serif type (e.g., "Gothic" or "Futura" capitals) shall be used for lettering. Numbers, symbols, trademarks, and other markings shall be similar in appearance and size to the lettering. The color of marking materials shall contrast with the body color of the part to insure legibility.

* 4.3.2 Method II (color-coding). The requirements specified in 5.3 shall be coded by using colors as shown in table I. Colors shall conform to American National Standard ANSI C83.1 (Electronic Industries Association Standard RS-359) and shall be within the preferred limits. Except as specified in 5.3.1, all codes shall be of equal size and equally spaced.

TABLE I. Standard colors.

Color	Color
Black	Blue
Brown	Violet
Red	Gray
Orange	White
Yellow	Gold
Green	Silver

4.4 Unit package marking. Each unit package shall include the following marking, as applicable:

(a) Design activity code.

(b) Identifying number.

(c) Source code, date code, and lot symbol.

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5. DETAILED REQUIREMENTS

5.1 Functional marking. Polarity, terminals, and other functional marking shall be as specified in the applicable FSC section. Terminal identification shall be specified in the procurement document. When color-coding is required to identify "numbered" terminals, the colors shall conform to the *Number* subcolumn of table II, unless otherwise specified in the applicable FSC section.

5.2 Method I (typographical-marking). When method I marking is applicable, requirements shall be specified in the procurement document as detailed herein, and shall be applied in the following order of precedence, as applicable: (See 6.3.)

(a) Design activity code (see 5.2.1).

(b) Identifying number (see 5.2.2).

(c) "JAN" brand (see 5.2.3).

(d) Trademark (see 5.2.4).

(e) Source code (see 5.2.5).

(f) Date code (see 5.2.6).

(g) Lot symbol (see 5.2.7).

(h) Characteristics and ratings (see 5.2.8).

5.2.1 *Design activity code.* The design activity code shall be the five-digit number assigned in Cataloging Handbook H 4-1. When the design activity code and identifying number are marked on one line, a dash or virgule shall separate the code from the number. This code shall be applied only when the design activity is other than the manufacturer of the part, and is not applicable to parts covered by military specifications.

5.2.2 *Identifying number.* The identifying number (part number, source control drawing number, etc.,) shall uniquely identify the part. A type designation (combination of letters and numbers assigned to differentiate design characteristics and part ratings) may identify a part when it is the only part identifier in an existing military specification.

5.2.3 *"JAN" brand.* The "JAN" brand shall be applied only to parts when authorized by a military specification. For abbreviated marking, the "J" may be specified. The "JAN" brand is registered as a U.S. Government certification mark by the U.S. Patent Office (Registration No. 504860).

NOTE: The presence of the "JAN" (or "J") brand constitutes certification that the part has met, and the manufacturer has not deviated from, the specification requirements.

5.2.4 *Trademark.* The trademark as registered with the U.S. Patent Office shall identify the manufacturer of the part.

5.2.5 *Source code.* Unless otherwise specified in the applicable FSC section, the source code shall identify the manufacturer and plant of manufacture of the part, and shall be the five-digit number assigned in Cataloging Handbook H 4-1.

5.2.6 *Date code.* A four-digit number shall identify the date of the production lot or inspection lot, as applicable, and shall be in accordance with the following:

(a) *Year* - The first two digits shall correspond to the last two digits of the calendar year.

(b) *Week* - The last two digits shall indicate the week of the calendar year. If only one number is required to indicate the week, it shall be preceded by a zero. The first week shall be considered the week in which the first Thursday of the year falls.

5.2.7 *Lot symbol.* Where a lot symbol is required by a procurement document, a single letter shall be used to identify a production lot. The letters shall be assigned alphabetically; however, letters "I", "O", "Q", "S", and "U" shall not be used. Where single-letter lot symbols do not cover the number of lots produced, double-letters ("AA", "BB", etc.,) shall be used.

5.2.8 *Characteristics and ratings.* Characteristics and ratings shall be in accordance with the applicable FSC section and the following:

(a) Letter symbols shall conform to ANS Y10.19.

(b) Graphic symbols shall conform to ANS Y32.2.

5.3 **Method II (color-coding).** When method II marking is applicable, requirements shall be specified in the procurement document as detailed herein. Color codes for part identification marking shall conform to table II. Requirements shall be coded by using dots or bands, as specified in the procurement document.

5.3.1 *Part.* The applicable part shown in table II shall be identified by one code; this code shall be twice the width or diameter of all other codes.

5.3.2 *Electrical characteristic value.* The value of the electrical characteristic (i.e., resistance, capacitance, or inductance) shall be identified by three codes, as follows (see table II):

(a) The first two codes shall represent the first and second digits of the characteristic value.

(b) The third code shall represent the factor by which the two digits are to be multiplied to complete the characteristic value identification.

5.3.3 *Tolerance value.* The tolerance value shall be identified by one code as shown in table II.

TABLE II. *Color codes for part identification marking.*

Color	Part	Significant figures of electrical characteristic value			Tolerance value 1/	FR level
		1st code	2nd code	3rd code		
		Number	Number	Multiplier		
Black	Capacitor	0	0	1	±20%	L
Brown . . .	———	1	1	10	± 1%	M
Red	———	2	2	100	± 2%	P
Orange . . .	———	3	3	1,000	———	R
Yellow . . .	———	4	4	10,000	———	S
Green	Diode	5	5	100,000	———	T
Blue	———	6	6	1,000,000	———	———
Violet	———	7	7	10,000,000	———	———
Gray	———	8	8	———	———	———
White	———	9	9	———	———	———
Gold	———	———	———	0.1	± 5%	———
Silver	Coil	———	———	0.01	±10%	———

1/ Additional values shall be as specified in applicable FSC section.

5.3.4 *Other characteristics and ratings.* Other characteristics and ratings shall be as shown in the applicable FSC section or procurement document.

5.3.5 *Failure rate (FR) level.* The FR level shall be identified by the last code.

(NOTE: This identification marking shall be applied only when authorized by a military specification.)

Example for color-coding of a 4300 ohm ±5%, M failure rate level composition resistor:

First code, yellow (4);
Second code, orange (3);
Third code, red (times 100);
Fourth code, gold (±5 percent); and
Fifth code, brown (M failure rate level)

6. NOTES

6.1 **Intended use.** This standard is intended for FSC 59GP with the following exclusions (refer to MIL-STD-130, "Identification Marking of US Military Property," which covers the marking requirements for these parts):

Class 5920 - Fuses and Lightning Arresters

Class 5940 - Lugs, Terminals, and Terminal Strips

Class 5965 - Headsets, Handsets, Microphones, and Speakers

Class 5970 - Electrical Insulators and Insulating Materials

Class 5975 - Electrical Hardware and Supplies

Class 5977 - Electrical Contact Brushes and Electrodes

Class 5990 - Synchros and Resolvers

Class 5995 - Cable, Cord, and Wire Assemblies: Communication Equipment

Class 5999 - Miscellaneous Electrical and Electronic Components

This standard may be applied to electrical and electronic parts that are covered by other FSC's (such as panel meters, FSC 6625), if desired.

6.2 **Permanency and legibility tests.** For the purpose of inspecting for permanency and legibility of marking (see 4.1 (a)), applicable test methods are as follows:

(a) Method 215 of MIL-STD-202, "Test Methods for Electronic and Electrical Component Parts."

(b) Method 1105 of MIL-STD-1311, "Test Methods for Electron Tubes."

(c) Method 2008 of MIL-STD-883, "Test Methods and Procedures for Microelectronics."

6.3 **Method I marking.**

6.3.1 *Full marking.* Figures 1 and 2 show examples of method I marking requirements applied in full. These examples are given only as guides and are not to be considered mandatory.

M39000/1-1406L	-	Identifying Number
JAN⟨ZZZ⟩	-	"JAN" Brand and Trademark
12345 6933A	-	Source Code; Date Code; and Lot Symbol
140μf ±5% 6V	-	Characteristics and Ratings

Figure 1. *Method I marking example for a military specification.*

68094-xxxxx-x	-	Design Activity Code and Identifying Number
⟨ZZZ⟩	-	Trademark
12345 6933A	-	Source Code; Date Code; and Lot Symbol
140 μf ±5% 6V	-	Characteristics and Ratings

Figure 2. *Method I marking example for an engineering drawing.*

6.3.2 *Size of characters.* Table III provides a guide for determining the number of characters and lines that can be marked on parts of a specified size. The height and width of characters, the spacing between lines, and the size of the part will determine the amount of information that can be marked on a part. Character height for legibility and the related approximate minimum length of marking space required are shown in this table.

TABLE III. *Approximate sizes required for marking.*

Diameter of part 1/	Number of lines	Character height	Number of characters in marking information 2/										
			5	6	7	8	9	10	11	12	13	14	15
			Approximate minimum length 3/										
.065	4	.025	.142	.169	.196	.223	.250	.277	.314	.341	.368	.395	.422
.065	3	.031	.120	.150	.180	.210	.240	.270	.300	.330	.360	.390	.420
.090	4	.046	.187	.218	.250	.312	.375	.406					
.250	9	.062	.300	.360	.420	.480	.540	.600	.660	.720	.780	.840	.900
.250	5	.093	.450	.540	.630	.720	.810	.900	.990	1.080	1.170	1.260	1.350
.250	5	.125	.600	.720	.840	.960	1.080	1.200	1.320	1.440	1.560	1.680	1.800

1/ Or equivalent size of non-cylindrical part.
2/ A dash (–) or virgule (/) is to be included as a character.
3/ When the part length is the same as, or larger than, the number given in the subcolumn, the next smaller number should be used (see 6.3.2.1).

6.3.2.1 *Procedures for using table for part dimensions of 0.090-inch diameter and 0.250-inch length.* In the first column, find the number equal to the part diameter (.090); in the fourth column, find the number equal to the part length (.250), and use the next smaller number (.218). The table indicates that the part can accommodate four lines of identification marking with six characters per line when the character height is .046 inch. Therefore, the procurement document can specify the following marking:

68094	-	Design Activity Code
12345	-	Identifying Number
⟨ZZZ⟩	-	Trademark
67890	-	Source Code

Custodians:
Army - EL
Navy - EC
Air Force - 17

Review activities:
Army - EL, WC, MI
Navy -
Air Force - 11, 85
DSA - ES

User activities:
Army -
Navy - AS, OS, MC, SH
Air Force -

Preparing activity:
Army - EL

Agent:
DSA - ES

(Project 5900-0015)

FSC SECTION 5905

RESISTORS

1. FUNCTIONAL MARKING (VARIABLE RESISTORS).

1.1 Terminal identification. Terminals shall be marked so that number 1 represents the counterclockwise terminal, number 2 represents the variable contact terminal, and number 3 represents the clockwise terminal.

1.1.1 Pin or solder-lug type. The numerals designating terminal identification may be marked adjacent to the terminal, or the circuit diagram (see figure 5905-1) may be used, provided that such identification clearly indicates the applicable terminals. The colors, as shown in figure 5905-1, are not required for pin or solder-lug terminal type resistors.

1.1.2 Flexible-lead type. Flexible-lead terminals shall be identified as follows:

Terminal No.	Color of insulation
1	Yellow
2	Red
3	Green

1.2 Other functional marking. A circuit diagram shall be marked on any surface of an adjustment type variable resistor (trimmers), in accordance with one of the optional diagrams shown in figure 5905-1.

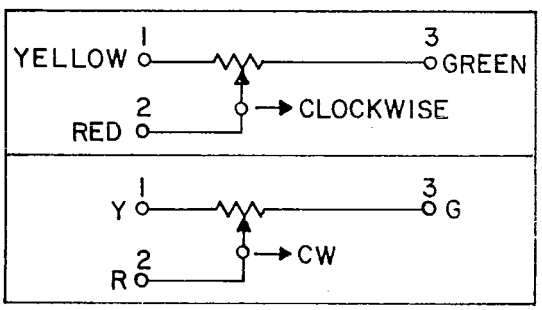

FIGURE 5905-1. Circuit diagram and terminal identification.

2. PART IDENTIFICATION MARKING. Marking of resistors shall conform to method I or II, as shown in table 5905-I.

2.1 Method I. Characteristics and ratings shall be marked in the sequence (reading from left to right) of the columnar headings shown under "Order of Precedence" in table 5905-I. Where physical size of the part precludes the marking of all characteristics and ratings, marking requirements shall be specified in the procurement document in the order of precedence shown by the numerical figures in table 5905-I.

TABLE 5905-I. Characteristic and rating marking requirements.

Marking method for resistor type		ORDER OF PRECEDENCE			
Method	Resistor type	Resistance	Resistance tolerance	Wattage	Temperature coefficient
I	Fixed (Wirewound)	1	2	4	3
II	Fixed (Composition)	1	2	-	-
I 1/	Fixed (Film)	1	2	4	3
I	Variable	1	2	3	4
I	Thermal ("Thermistor")	1	2	-	3

1/ Color coding may be applicable in procurement documents approved prior to this standard, and to subsequent revisions of such documents.

2.2 Method II. Method II marking may be specified in new procurement documents for composition resistors only. Characteristics shall be marked as shown in table 5905-I by color bands only. (Figure 5905-2 shows the marking of resistors to indicate the resistance value, resistance tolerance, and FR level.)

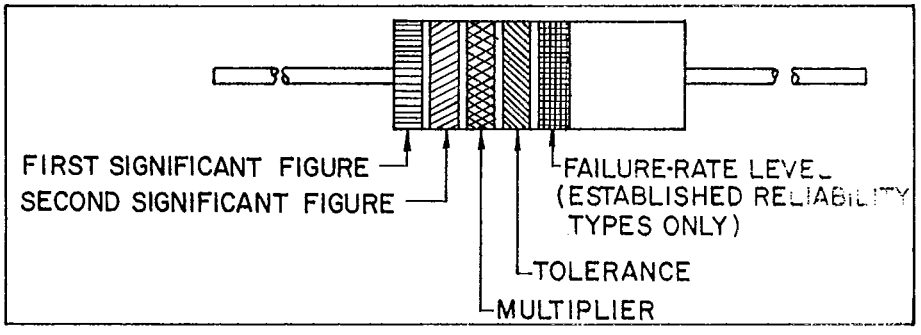

FIGURE 5905-2. Marking of composition-type resistors.

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FSC SECTION 5910

CAPACITORS

1. FUNCTIONAL MARKING.

1.1 Polarity. Polarized capacitors shall be marked as follows:

(a) A single "+" symbol shall indicate the positive terminal on nontubular and single-ended tubular capacitors.

(b) A minimum of four "+" symbols shall indicate the positive terminal on axial-lead tubular capacitors. These shall be located approximately 90 degrees apart, at a distance no greater than 25 percent of the total body length away from the positive end of the body and located so as to be readily distinguishable from other markings.

(c) All other symbols or marking required shall be as specified in the procurement document.

1.2 Other functional marking. For nonmetallic cased tubular, fixed, metallized or foil paper, paper-plastic, and plastic capacitors, a black color-stripe shall be placed at the end of the capacitor to identify the terminal connected to the outer electrode. For axial-lead capacitors, the stripe shall encircle the case; for radial-lead capacitors, the stripe shall encircle one-half of the case circumference.

2. PART IDENTIFICATION MARKING. Marking of capacitors shall conform to method I or II, as specified in the procurement document. Characteristics and ratings shall be marked in the sequence (reading from left to right) of the columnar heading shown under "Order of Precedence" in table 5910-I. In addition to the requirements of 5.3, method II marking shall include the following color-codes:

Cap. tolerance (±)	Color
30%	Orange
40%	Yellow
15%	Blue

Other ratings and applicable codes for method II shall be as specified in the procurement document. Where size limitations will not accommodate all of these characteristics and ratings, marking requirements shall be specified in the procurement document in the order of precedence shown by the numerical figures in table 5910-I.

2.1 Marking location. All method I marking of insulated capacitors shall be applied to the case. Method II marking shall be applied starting with (or clockwise from) the "part" code (black).

TABLE 5910-I. *Characteristic and rating marking requirements.*

Dielectric	ORDER OF PRECEDENCE				
	Cap.	Cap. tolerance	Voltage	Temp.	Current
AIR:					
Fixed	1	3	2	4	–
Variable	1	–	2	3	–
CERAMIC:					
Fixed	1	3	2	4	–
Variable	1	–	2	3	–
ELECTROLYTIC:					
Fixed	1	4	2	3	–
GLASS:					
Fixed	1	3	2	4	–
METALLIZED PAPER:					
Fixed	1	3	2	4	–
MICA:					
Fixed	1	5	2	4	3
PAPER:					
Fixed	1	5	2	4	1/ 3
PAPER-PLASTIC:					
Fixed	1	4	2	3	–
PLASTIC:					
Fixed	1	4	2	3	–
VACUUM:					
Fixed	1	–	2	4	3
Variable	1	–	2	4	3

1/ Applicable to feed-thru and by-pass capacitors.

FSC SECTION 5915

FILTERS AND NETWORKS

1. FUNCTIONAL MARKING.

(To be inserted)

2. PART IDENTIFICATION MARKING.

Marking of filters and networks shall conform to method I. Exceptions or additions to the requirements of 5.2 shall be as specified in the procurement document.

FSC SECTION 5925

CIRCUIT BREAKERS

1. FUNCTIONAL MARKING.

(To be inserted)

2. PART IDENTIFICATION MARKING.

Marking of circuit breakers shall conform to method I. Exceptions or additions to the requirements of 5.2 shall be as specified in the procurement document.

FSC SECTION 5930

SWITCHES

1. FUNCTIONAL MARKING.

(To be inserted)

2. PART IDENTIFICATION MARKING.

Marking of switches shall conform to method I. Exceptions or additions to the requirements of 5.2 shall be as specified in the procurement document.

FSC SECTION 5935

CONNECTORS

1. FUNCTIONAL MARKING.

(To be inserted)

2. PART IDENTIFICATION MARKING.

Marking of connectors shall conform to method I. Exceptions or additions to the requirements of 5.2 shall be as specified in the procurement document.

FSC SECTION 5945

RELAYS, CONTACTORS, AND SOLENOIDS

1. FUNCTIONAL MARKING.

(To be inserted)

2. PART IDENTIFICATION MARKING.

Marking of relays, contactors, and solenoids shall conform to method I. Exceptions or additions to the requirements of 5.2 shall be as specified in the procurement document.

FSC SECTION 5950

COILS AND TRANSFORMERS

1. FUNCTIONAL MARKING.

(To be inserted)

2. PART IDENTIFICATION MARKING.

Marking of coils and transformers shall conform to method I. Exceptions or additions to the requirements of 5.2 shall be as specified in the procurement document.

FSC SECTION 5955

PIEZOELECTRIC CRYSTALS

1. FUNCTIONAL MARKING.

(To be inserted)

2. PART IDENTIFICATION MARKING.

Marking of piezoelectric crystals shall conform to method I. Exceptions or additions to the requirements of 5.2 shall be as specified in the procurement document.

FSC SECTION 5960

ELECTRON TUBES

NOTE: This section does not apply to hardware associated with electron tubes.

1. FUNCTIONAL MARKING.

(To be inserted)

2. PART IDENTIFICATION MARKING.

Marking of electron tubes shall conform to method I. Exceptions or additions to the requirements of 5.2 shall be as specified in the procurement document.

FSC SECTION 5961

SEMICONDUCTOR DEVICES

1. FUNCTIONAL MARKING.

1.1 **Polarity.** Polarity of diodes shall be indicated as follows:

1.1.1 *Axial-lead diodes.* A green color band encircling the body at the negative terminal for forward bias.

1.1.2 *Diodes (except axial-lead).* A diode graphic symbol (with the arrow pointing to the negative terminal for forward bias).

2. **PART IDENTIFICATION MARKING.** Marking of semiconductor devices shall conform to method I. Exceptions and additions to the requirements of 5.2 are as follows:

"JAN" brand - The "JAN" brand shall be added as a prefix to the identifying number and shall only be applied under the conditions specified in a military specification.

Source code - The manufacturer's designating symbol shall be marked on the device and shall be as listed in NAVSHIPS 0967-190-4010. The designating symbol shall be used only by the manufacturer to whom it has been assigned and only on those devices manufactured at that manufacturer's plant. In the case of small devices, the procurement document shall specify the devices on which the manufacturer's designating symbol may be abbreviated by omitting the first "C" in the series of letters.

Country of origin - The country of origin shall be the last part marking to be applied.

FSC SECTION 5962

MICROELECTRONIC CIRCUIT DEVICES

1. FUNCTIONAL MARKING

1.1 Terminal index point. An index point shall be visible from the top of a peripheral-lead package (flat-pack and dual in-line) in the upper left-hand corner adjacent to the number "1" terminal. The exact location of this index point is not critical as long as the specific corner is clearly identified. An index point located in the indexing area shall be visible from the top of a cylindrical, axial-lead package. (See figure 5962-1.)

1.2 Terminal lead position. Viewing the peripheral-lead package from the top, the number "1" terminal lead is the extreme end lead or potential lead position on the upper left side of the package. All other terminals shall be identified counterclockwise from this indexing point. Viewing the cylindrical, axial-lead package from the bottom, the number "1" terminal lead is adjacent to and clockwise from the indexing point. All other terminals shall be identified clockwise from this indexing point.

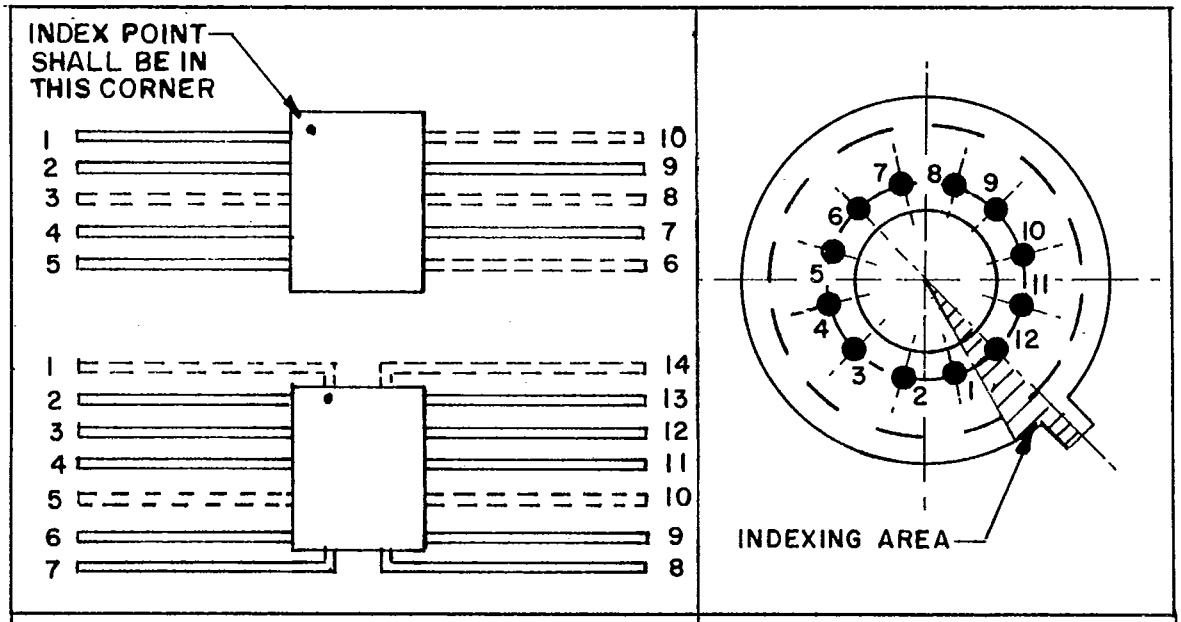

FIGURE 5962-1. *Indexing of packages.*

2. PART IDENTIFICATION MARKING. Marking of microelectronic circuit devices shall conform to method I, except characteristics and ratings are not applicable. Additions to the requirements of 5.2 are as follows:

Manufacturer's serial number (if required by procurement document).
Country of origin.

These requirement(s) will be the last marking(s) to be applied.

2.1 Marking location. The design activity code, identifying number, date code, and inspection lot code shall be marked on the top of devices of rectangular configuration, and on the side of cylindrical packages. All other part identification marking may be applied to the back of rectangular packages or the top of cylindrical packages.