

INCH-POUND

MIL-R-10509/1M
 10 August 2001
 SUPERSEDING
 MIL-R-10509/1L
 17 April 1985

MILITARY SPECIFICATION
 RESISTORS, FIXED, FILM (HIGH STABILITY),
 STYLE RN60

INACTIVE FOR NEW DESIGN AFTER 9 MAY 1972.
 USE MIL-PRF-55182/3.

This specification is approved for use by all Departments
 And Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers the requirements for style RN60, high stability, film, fixed, resistors. This style is available in characteristics C, D, E, and G.

1.2 Part or Identifying Number (PIN). Resistors covered by this specification is identified by a PIN which consist of the style of this specification and a coded number. The PIN is in following form:

RN60	D1003F
Specification style number	Coded number

2 APPLICABLE DOCUMENT

2.1 General. The documents listed in this section are specified in sections 3 and 4 of the specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Defense Supply Center, Columbus, ATTN: DCSS-VAT, Post Office Box 3990, Columbus, Ohio 43216-5000, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of the document or by letter.

AMSC N/A

FSC 5905

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

DEPARTMENT OF DEFENSE

MIL-R-10509 - Resistors, Fixed, Film (High Stability), General Specification for.

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Department Automation and Production Service, Building 4D, (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related associated specifications, specification sheets, or MS sheets), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 General. The requirements for acquiring the product described herein shall consist of this document and MIL-R-10509.

3.2 Interface and physical dimensions. Resistors shall meet the interface and physical dimensions specified on figure 1.

3.3 Power rating. The power rating shall be 0.125 watt. For characteristic D, the power rating shall be 0.25 watt.

3.4 Voltage rating. The maximum continuous working voltage shall not exceed 250 volts. For characteristic D, the maximum continuous working voltage shall not exceed 300 volts.

3.5 Resistance. Minimum and maximum resistance values shall be as follows in table I.

TABLE I. Minimum and maximum resistance.

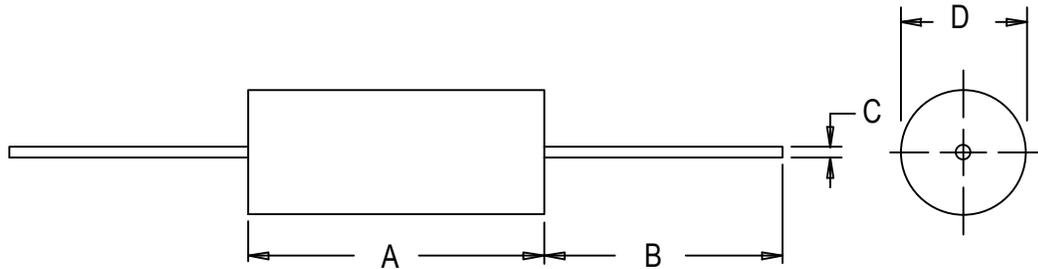
Minimum resistance		Maximum resistance	
Characteristics	Ohms	Characteristics	Megohms
D, G	10.0	D, G	1.0
C, E	49.9	C, E	0.4999

4. VERIFICATION

4.1 Sampling and inspection. Sampling and inspection shall be in accordance with MIL-R-10509.

4.2 Terminal strength. Direct load shall be applied gradually until the load reaches 2 pounds.

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<u>Dimension</u>	<u>Inches</u>	<u>mm</u>
A	0.375 +0.062, -0.092	9.53 +1.57, -2.34
B	1.500 ±0.125	38.10 ±3.18
C	0.025 ±0.002	0.64 ±0.05
D	0.125 +0.040, -0.031	3.18 +1.02, -0.79

NOTE:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. The end of the body shall be that point at which the body diameter equals the nearest drill size larger than 150 percent of the normal lead diameter, or 300 percent of the nominal lead diameter. The same drill size shall be used for each end of the body.
4. The leads shall be solderable to within 0.062 (1.58 mm) of the resistor body.

FIGURE 1. Style RN60.

5. PACKAGING

5.1 Packaging. For acquisition purposes, packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of material is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products or by contacting the responsible packaging activity.

6. NOTES

6.1 Intended use. The notes specified in MIL-R-10509 are applicable to this specification.

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6.2 Acquisition requirements. Acquisition documents must specify the following.

- a. Title, number, and date of this specification.
- b. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2.1).
- c. Packaging requirements (see 5.1).

6.3 Substitution data. The resistors specified herein are not for use in design after 9 May 1972. They are authorized for use in design contracts effective prior to or on 9 May 1972. Existing equipment shall be supported by substitute resistors in MIL-PRF-55182/3 of the same resistance value, resistance tolerance, and characteristic performance of this specification regardless of failure rate designation. Resistors specified in MIL-PRF-55182/3 are preferred for design and regardless of failure rate designation can be used as substitutes for inactivated resistors of the same resistance value, tolerance, and characteristic performance of this specification. Characteristics C, E, and G were previously inactivated for design by revision H of this specification, dated 22 November 1968. Characteristic substitution shall be made as indicated in table II.

TABLE II. Characteristic substitution.

MIL-R-10509 characteristic	Substitute MIL-PRF-55182 characteristic
C	H
D	K
E	J
G	C

6.4 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:
Army - CR
Navy - EC
Air Force - 11

Preparing activity:
DLA - CC

(Project 5905-1627-01)

Review activities:
Army - AR, AT, CR4, MI
Navy - AS, CG, MC, OS
Air Force - 19, 99