

INCH-POUND
MIL-PRF-39017/2K
19 May 1997
SUPERSEDING
MIL-R-39017/2J
19 March 1991

PERFORMANCE SPECIFICATION

RESISTORS, FIXED, FILM (INSULATED), NONESTABLISHED RELIABILITY, AND ESTABLISHED RELIABILITY, STYLE RLR20

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 associated requirements for style RLR20, nonestablished reliability and established reliability, insulated, film, fixed resistors.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this 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.

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).

Beneficial comment (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be address to: Commander, US Army Communications-Electronics Command, ATTN: AMSEL-LC-LEO-E-EP, Fort Monmouth, NJ 07703-5023 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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SPECIFICATION

DEPARTMENT OF DEFENSE

MIL-PRF-39017 - Resistors, Fixed, Film (Insulated), NonEstablished Reliability and Established Reliability, General Specification for.

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Defense Printing Service Detachment Office, Building 4D (Customer Service), 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, 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-PRF-39017.

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

3.3 Power rating. The power rating shall be 0.50 watt.

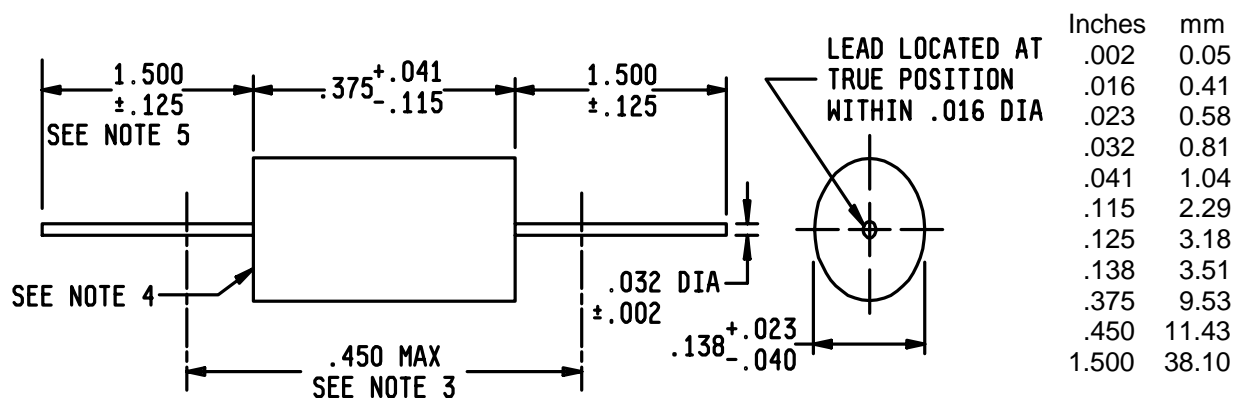
3.4 Voltage rating. The continuous working voltage shall not exceed 350 volts.

3.5 Resistance and resistance tolerance. Minimum resistance and maximum resistance values and resistance tolerance for temperature characteristics of ± 100 parts per million (PPM) and ± 350 PPM shall be as follows:

	<u>100 PPM</u>	<u>350 PPM</u>
Resistance tolerance (percent)	1, 2	2, 5, 10
Minimum resistance	1.0 Ω	3.3 M Ω
Maximum resistance	3.01 M Ω	22 M Ω

3.6 Maximum weight. The maximum weight shall not exceed 0.75 gram.

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NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Maximum length is "clean lead" to "clean lead".
4. The end of the body shall be that point at which the body diameter equals the nearest drill size larger than 250 percent of the nominal lead diameter.
5. Lead length for tape and reel packaging shall be 1 inch (25.4 mm) minimum (see 6.2).

FIGURE 1. Style RLR20 resistor.

4. VERIFICATION

- 4.1 Sampling and inspection. Sampling and inspection shall be in accordance with MIL-PRF-39017.
- 4.2 Power conditioning. The maximum voltage applied shall not exceed 350 volts, ac or dc.
- 4.3 Dielectric withstanding voltage. The test voltages applicable to style RLR20 are as follows:

Atmospheric pressure - 500 volts rms.
Barometric pressure - 250 volts rms.

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 materiel 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 the 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.

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6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Notes. The notes specified in MIL-PRF-39017 are applicable to this specification.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of the specification, and complete PIN.
- b. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1).
- c. Packaging requirements (see 5.1).
- d. Lead length requirements for tape and reel packaging. (Contractor may specify smaller lengths in the purchase order).

6.3 Substitution data.

6.3.1 MIL-R-22684. Resistors of this specification, regardless of their failure rate (FR) designation, are substitutes for resistors of the same resistance value and tolerance specified in the inactivated specification sheet MIL-R-22684/1.

6.3.2 MIL-R-39008. Resistors of this specification, regardless of their FR designation are suggested replacements for resistors of the same resistance value and tolerance specified in the specification sheet MIL-R-39008/2.

6.3.3 MIL-R-11. Resistors of this specification, regardless of their FR designation are suggested replacements for resistors of the same resistance value and tolerance specified in MIL-R-11/3.

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 extent of the changes.

Custodians:
Army -CR
Navy - EC
Air Force - 85

Review activities:
Army - AR, AT, AV, ME
Navy - AS, CG, MC, OS
Air Force - 17, 19, 99

Preparing activity:
Army - CR

Agent:
DLA - CC

(Project 5905-1454-02)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL**INSTRUCTIONS**

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER MIL-PRF-39017/2K	2. DOCUMENT DATE (YYMMDD) 970519
3. DOCUMENT TITLE RESISTORS, FIXED, FILM (INSULATED), NONESTABLISHED, AND ESTABLISHED RELIABILITY, STYLE RLR20		
4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)		
5. REASON FOR RECOMMENDATION		
6. SUBMITTER		
a. NAME (Last, First, Middle initial)	b. ORGANIZATION	
c. ADDRESS (Include Zip Code)	d. TELEPHONE (Include Area Code) (1) Commercial (2) AUTOVON (If applicable)	7. DATE SUBMITTED (YYMMDD)
8. PREPARING ACTIVITY		
a. NAME US Army Communications-Electronics Command	b. TELEPHONE (Include Area Code) (1) Commercial (908) 427-3441 (2) AUTOVON 987-3441	
c. ADDRESS (Include Zip Code) ATTN: AMSEL-LC-LEO-E-EP Fort Monmouth, NJ 07703-5023	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340 AUTOVON 289-2340	