

TINCH-POUND

MIL-R-39017/5L  
19 March 1991  
SUPERSEDING  
MIL-R-39017/5K  
12 January 1990

MILITARY SPECIFICATION

RESISTORS, FIXED, FILM, (INSULATED),  
ESTABLISHED RELIABILITY  
STYLE RLR05

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 detail requirements for style RLR05, established reliability, insulated, film, fixed resistors.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

\* 2.1.1 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).

SPECIFICATION

MILITARY

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

\* (Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.2 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 specification, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Requirements. Requirements shall be in accordance with MIL-R-39017, and as specified herein.

3.2 Design, construction, and physical dimensions. The resistors shall be of the design, construction, and physical dimensions as specified on figure 1.

3.3 Power rating. The power rating shall be 0.125 watt.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: U.S. Army Laboratory Command (LABCOM), ATTN: SLCET-R-S, Fort Monmouth, NJ 07703-5000 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.
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AMSC N/A

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3.4 Voltage rating. The continuous working voltage shall not exceed 200 volts.

\* 3.5 Resistance. Minimum and maximum resistance values for temperature characteristics of  $\pm 100$  PPM and  $\pm 350$  PPM shall be as follows:

	100 PPM	350 PPM
Minimum resistance	4.7 $\Omega$	1.1 M $\Omega$
Maximum resistance	1 M $\Omega$	22 M $\Omega$

3.6 Maximum weight. The maximum weight shall not exceed 0.3 gram.

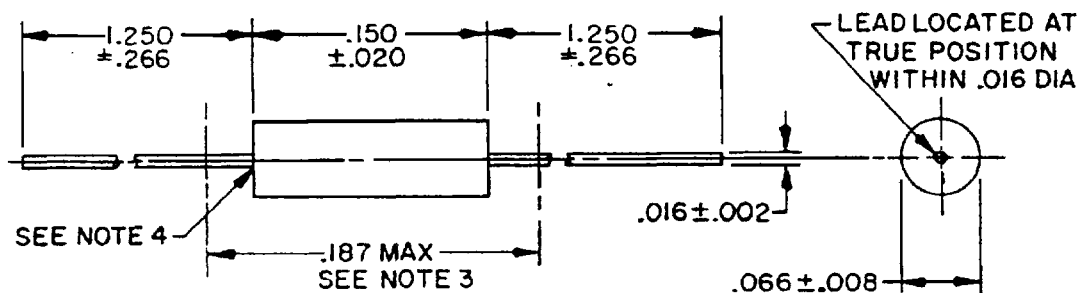
3.7 Marking. Due to size limitations this style resistor shall be marked with the following minimum information:

123A - Year and week manufactured, lot code (letters "O" and "I" excluded).

1003 - Resistance value.

GMJ\* - Resistance tolerance, failure rate designator, JAN marking, and manufacturer's code (see qualified products list for manufacturers code symbols).

Full marking is required on the unit package.



Inches	mm
.002	0.05
.008	0.20
.016	0.41
.020	0.51
.066	1.68
.150	3.81
.187	4.75
.266	6.76
1.250	31.75

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 minimum.

FIGURE 1. Style RLR05 resistor.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 Sampling and inspection. Sampling and inspection shall be in accordance with MIL-R-39017.

4.2 Power conditioning. The maximum voltage applied shall not exceed 250 volts, ac or dc.

4.3 Dielectric withstanding voltage. The test voltages applicable to style RLR05 are as follows:

Atmospheric pressure - 300 volts rms.  
Barometric pressure - 200 volts rms.

#### 5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-R-39032.

#### 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-R-39017 are applicable to this specification.

##### 6.2 Substitution data.

6.2.2 MIL-R-11. Resistors of this specification of resistance tolerance "G" are substitutes for style RCO8 of MIL-R-11/1 in the following resistance range: 10 ohms through 1 megohm inclusive. Use MIL-R-39008/4, style RCR05 resistance tolerance "J", for RCO8 values from 1.1 megohms through 22 megohms inclusive.

6.3 Changes from previous issue. The margins of this specification are marked with asterisks to indicate where changes (additions, modifications, corrections, deletions) from the previous issue 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.

#### CONCLUDING MATERIAL

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(Project 5905-1232)



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<b>I RECOMMEND A CHANGE:</b>		1. DOCUMENT NUMBER MIL-R-39017/5L	2. DOCUMENT DATE (YYMMDD) 19 March 1991
3. DOCUMENT TITLE Resistors, Fixed, Film, (Insulated), Established Reliability Style RLR05			
4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)			
5. REASON FOR RECOMMENDATION			
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