

INCH-POUND

MIL-PRF-39035/1D  
12 February 1998  
SUPERSEDING  
MIL-PRF-39035/1C  
31 January 1994

PERFORMANCE SPECIFICATION  
RESISTORS, VARIABLE, NONWIRE WOUND  
(ADJUSTMENT TYPE, LEAD-SCREW ACTUATED),  
NONESTABLISHED RELIABILITY, AND ESTABLISHED RELIABILITY  
STYLE RJR12

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 RJR12, nonestablished reliability, and established reliability, adjustment type, lead-screw actuated, nonwire wound, variable resistors. This style is available in characteristic C, F, and H.

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



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.

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: DSCC-VAM, Post Office Box 3990, Columbus, OH 43216-5000 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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.

SPECIFICATION

DEPARTMENT OF DEFENSE

MIL-PRF-39035 - Resistors, Variable, Nonwire-wound (Adjustment Type), Nonestablished Reliability, and Established Reliability, General Specification for.

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Defense Automated Printing Service, Building 4D (DPM-DODSSP), 700 Robins 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-39035.

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 3/4 watt.

3.4 Terminals. All characteristics are available with L- and Y- type terminals.

3.5 Nominal resistance value and maximum rated ac or dc working voltage. Nominal resistance values and maximum rated ac or dc working voltages shall be as specified in table I.

3.6 Actual effective electrical travel. Actual effective electrical travel shall be 17 turns minimum, and 27 turns maximum.

3.7 Operating torque. Operating torque shall be a maximum of 8 ounces-inches.

3.8 Maximum voltage. Maximum rated ac or dc working voltage shall be 300 volts.

TABLE I. Nominal resistance value and maximum rated ac or dc working voltage.

Nominal resistance value	Maximum rated ac or dc working voltage per characteristics
	C, F, and H
<u>Ohms</u>	
10	2.73
20	3.8
50	6.1
100	8.7
200	12.3
500	19.4
1,000	27.4
2,000	38.7
5,000	61.3
10,000	86.7
20,000	122
25,000	136
50,000	194
<u>Megohms</u>	
0.10	274
0.20	300
0.25	300
0.50	300
1.00	300

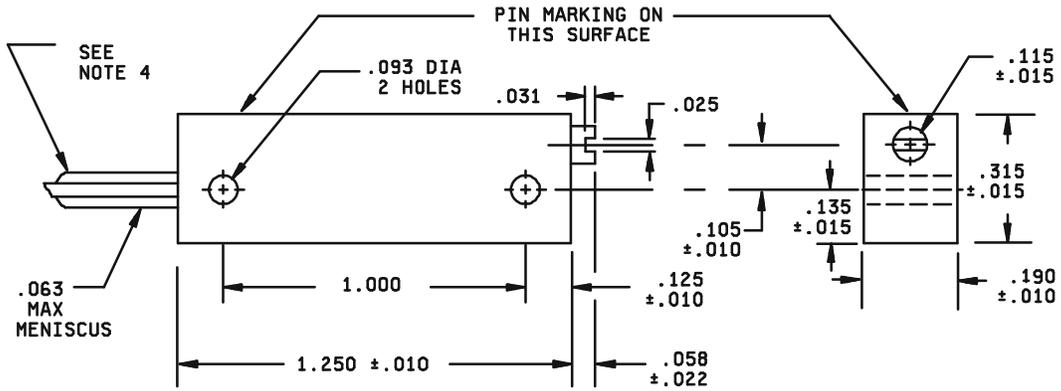
4. VERIFICATION

4.1 Sampling and inspection. Sampling and inspection shall be in accordance with MIL-PRF-39035, and as specified herein.

4.2 Dielectric withstanding voltage. The magnitude of test voltage shall be 900 volts for all characteristics at atmospheric pressure, and 350 volts for all characteristics at reduced barometric pressure.

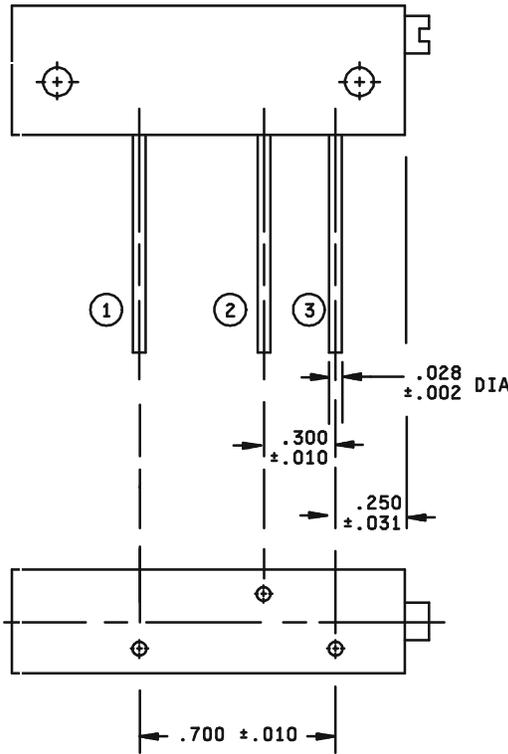
5. PACKAGING

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 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.

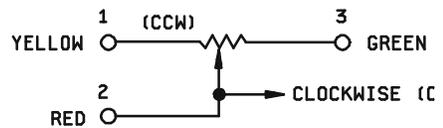
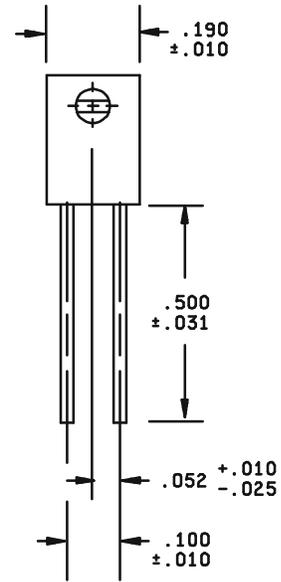


FLEXIBLE LEAD TERMINA TYPE L

Inches	mm
.002	0.05
.010	0.25
.015	0.38
.022	0.56
.025	0.64
.028	0.71
.031	0.79
.052	1.32
.058	1.47
.063	1.60
.093	2.36
.100	2.54
.105	2.67
.115	2.92
.125	3.18
.135	3.43
.190	4.83
.250	6.35
.300	7.62
.315	8.00
.500	12.70
.700	17.78
1.000	25.40
1.250	31.75



PRINTED CIRCUIT PIN TERMINAL TYPE Y



SCHMETIC DIAGRAM

FIGURE 1. Style RJR12 resistors

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is  $\pm 0.005$  (0.13 mm).
3. Metric equivalents are given for general information only.
4. The three leads shall be insulated wire, AWG size 28 to 30, having a minimum length of 6 (152.4 mm); they shall be insulated with polytetrafluoroethylene, stripped  $.250 \pm 0.062$  ( $6.35 \pm 1.57$  mm) from the end and color coded.
5. The picturization of the styles above are given as representative of the envelope of the item. Slight deviations from the outline shown, which are contained within the envelope, and do not alter the functional aspects of the device are acceptable.
6. Terminal Y case shall meet all dimension requirements as shown for terminal L case, except as noted.

FIGURE 1. Style RJR12 resistors - Continued.

6. NOTES

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

6.1 Intended use. The notes specified in MIL-PRF-39035 are applicable to this specification.

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).

6.3 Weight. The weight is .159 ounces (4.5 grams).

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 - 85

Preparing activity:  
DLA - CC

Review activities:  
Army - AR, AT, AV, CR4, MI  
Navy - AS, MC, OS  
Air Force - 17, 19, 99

(Project 5905-1473-01)