INCH-POUND

MIL-PRF-39035/4F
12 February 1998
SUPERSEDING
MIL-PRF-39035/4E
31 January 1994

PERFORMANCE SPECIFICATION

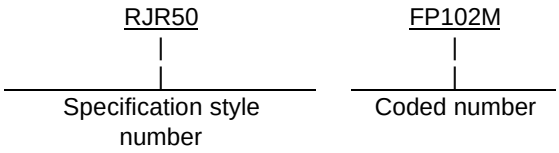
RESISTORS, VARIABLE, NONWIRE-WOUND (ADJUSTMENT TYPE, SINGLE TURN), NONESTABLISHED RELIABILITY, AND ESTABLISHED RELIABILITY STYLE RJR50

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 RJR50, nonestablished reliability, and established reliability, adjustment type, single turn, nonwire-wound, variable resistors. This style is available in characteristic 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 (see 6.2).

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 above specification, standards, and handbooks are available from the Defense Automated Printing 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 detail specifications, specification sheets, or MS standards), 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 1/4 watt for characteristics F and H.

3.4 Terminals. Characteristics F and H are available in P- type terminal.

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 215° minimum.

3.7 Torque.

3.7.1 Operating. Operating torque shall be a maximum of 2.0 ounces-inches.

3.7.2 Stop. The stop shall withstand a force of 4 ounce-inches when this amount of torque is applied through the operating shaft to the stop.

3.8 Maximum voltage. Maximum rated ac or dc working voltage shall be 200 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
	F and H
Ohms	
10	1.58
20	2.23
50	3.54
100	5.0
200	7.07
500	11.1
1,000	15.8
2,000	22.3
5,000	35.4
10,000	50.0
20,000	70.7
25,000	79.0
50,000	111
Megohms	
0.10	158
0.20	200
0.25	200
0.50	200
1.00	200

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

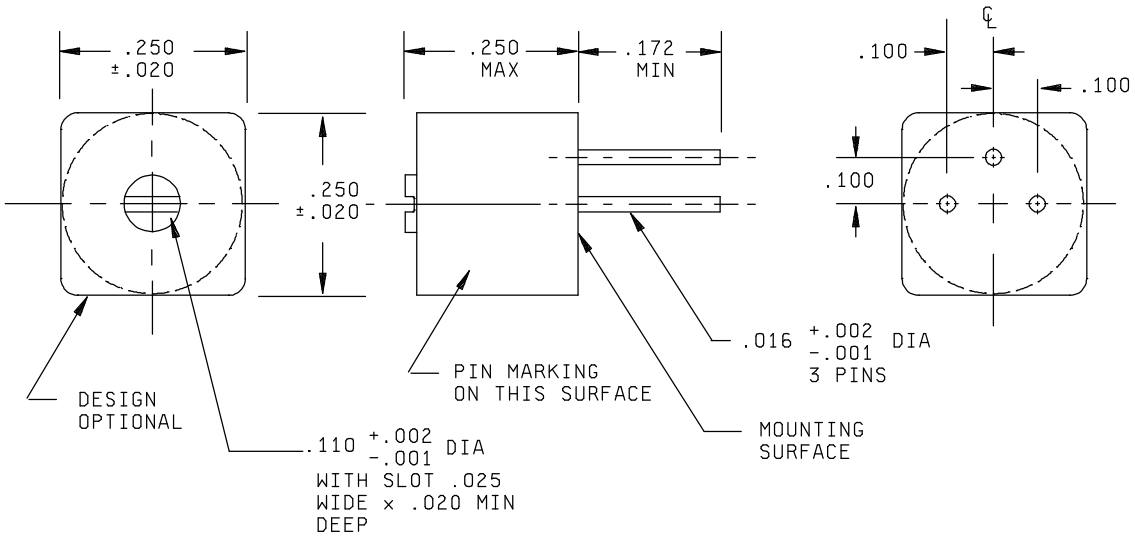
7523A - Date code, lot code.
FP102MJ - Characteristic, terminal, resistance value, failure rate and JAN marking.
12345 - Source code.

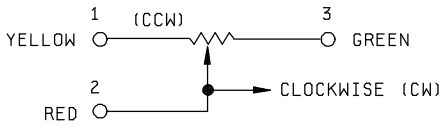
The complete marking is required on the unit package.

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 600 volts rms at atmospheric pressure, and 250 volts rms at reduced barometric pressure.





SCHMETIC DIAGRAM

Inches	mm
.001	0.03
.010	0.25
.015	0.38
.016	0.41
.020	0.51
.025	0.64
.100	2.54
.110	2.79
.250	6.35
.312	7.92
.375	9.53

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is±.005 (0.13 mm).
3. Metric equivalents are given for general information only.
4. Mounting means are by use of pins only.
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. The head of the actuating screw may or may not be flush with or recessed in the body.

FIGURE 1. Style RJR50 resistors.

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's 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

(This section contains information of a general or explanatory nature that may be helpful, but is 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 .021 ounces (0.6 grams).

6.4 Application of packaging

6.4.1 Shipments to Government activities. The packaging requirements of this specification are primarily intended for the preparation of resistors for shipment to Government activities.

6.4.2 Shipments of ER (resistors) to Government contractors and manufacturer's distributors. Federal Standard No. 356, Commercial Packaging of Supplies and Equipment, should be specified to Government contractors and subcontractors and to category A and B distributors as defined in MIL-STD-790. The marking of the unit container should not be required provided the intermediate container is marked.

6.5 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

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

Preparing activity:
DLA - CC

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