

INCH-POUND

MIL-PRF-49462/3B
12 February 2001
SUPERSEDING
MIL-PRF-49462/3A
27 April 1988

PERFORMANCE SPECIFICATION

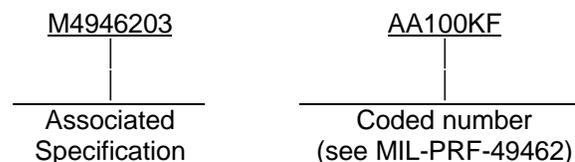
RESISTORS, FIXED, FILM, HIGH VOLTAGE STYLES RHV30, RHV31, RHV32, RHV33, RHV34, RHV35

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 performance requirements for styles RHV30, RHV31, RHV32, RHV33, RHV34, and RHV35 resistors.

1.2 Part or Identifying Number (PIN). Resistors covered by this specification is identified by a PIN which consist of a basis style of this specification and a coded number. The PIN is 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 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 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-VAT, Post Office Box 3990, Columbus, Ohio 43216-5000, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 5905

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

SPECIFICATION

DEPARTMENT OF DEFENSE

MIL-PRF-49462 - Resistors, Fixed, Film, High Voltage, General Specification For.

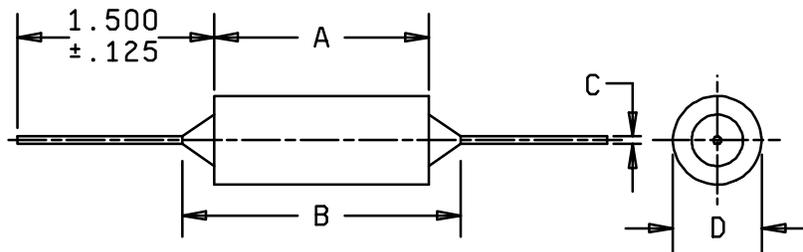
(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Document Automation and Production Service, Building 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.2 Order of precedence. In the event of a conflict between the text of this document and the reference 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. REQUIREMENT

3.1 General. The requirements for acquiring the product described herein shall consist of this document and MIL-PRF-49462.

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



| Inches | mm |
|--------|-------|
| .032 | 0.81 |
| .125 | 3.18 |
| 1.500 | 38.10 |

| | RHV30 | RHV31 | RHV32 | RHV33 | RHV34 | RHV35 |
|----------|-------------------------------|--------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| A | 0.275 ±0.031 (6.98 ±0.079) | 0.400 ±0.031 (10.16 ±0.079) | 0.690 ±0.062 (17.53 ±1.57) | 1.062 ±0.062 (26.97 ±1.57) | 2.062 ±0.062 (52.37 ±1.57) | 3.062 ±0.062 (77.77 ±1.57) |
| B max | 0.400 (10.16) | 0.525 (13.34) | 0.900 (22.86) | 1.250 (31.75) | 2.250 (57.15) | 3.250 (88.55) |
| C | 0.025 ±0.002 (0.635 ±0.05) | 0.032 ±0.002 (0.81 ±0.05) | 0.032 ±0.002 (0.81 ±0.05) | 0.032 ±0.002 (0.81 ±0.05) | 0.032 ±0.002 (0.81 ±0.05) | 0.032 ±0.002 (0.81 ±0.05) |
| D | 0.088 ±0.010 (2.22 ±0.25) | 0.138 ±0.016 (3.51 ±0.41) | 0.297 ±0.031 (7.54 ±0.79) | 0.297 ±0.031 (7.54 ±0.79) | 0.297 ±0.031 (7.54 ±0.79) | 0.297 ±0.031 (7.54 ±0.79) |

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Metric equivalents are in parentheses.

FIGURE 1. Resistors, fixed, film, high voltage.

3.3 Power rating. The power rating shall be as specified in table I, based on a full load operation at an ambient temperature of 70°C . For operation at temperatures higher than 70°C , derate in accordance with figure 2.

TABLE I. Power rating.

| Style | Power rating (watts) | Style |
|-------|----------------------|-------|
| RHV30 | 0.25 | A |
| RHV31 | 0.5 | B |
| RHV32 | 1.0 | C |
| RHV33 | 2.0 | D |
| RHV34 | 3.0 | E |
| RHV35 | 5.0 | F |

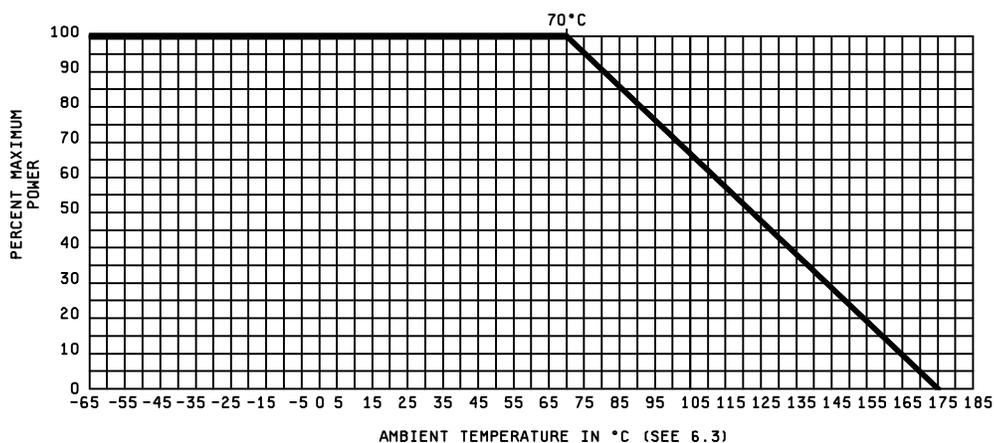


FIGURE 2. Derating curve.

3.4 Resistance. The minimum and maximum nominal resistance values shall be as specified in table II.

TABLE II. Minimum and maximum nominal resistance values.

| Style | Resistance value (ohms) | | Style |
|-------|-------------------------|---------|-------|
| | Minimum | Maximum | |
| RHV30 | 100 k | 100 M | A |
| RHV31 | 100 k | 392 M | B |
| RHV32 | 49.9 k | 499 M | C |
| RHV33 | 100 k | 499 M | D |
| RHV34 | 200 k | 1 G | E |
| RHV35 | 330 k | 1 G | F |

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3.5 Maximum voltages. Maximum voltages shall be in accordance with table III.

TABLE III. Maximum voltages.

| Style | Maximum voltage (volts) | Style |
|-------|-------------------------|-------|
| RHV30 | 750 | A |
| RHV31 | 1.5 k | B |
| RHV32 | 3.0 k | C |
| RHV33 | 5.0 k | D |
| RHV34 | 10.0 k | E |
| RHV35 | 20.0 k | F |

3.6 Resistance tolerance. The resistance tolerance is identified by a single letter in accordance with table IV.

TABLE IV. Resistance tolerance.

| Symbol | Resistive tolerance percent (\pm) |
|--------|---------------------------------------|
| F | 1.0 |
| G | 2.0 |
| J | 5.0 |

3.7 Outgassing. Outgassing shall be as specified in MIL-PRF-49462.

4. VERIFICATION

4.1 Sampling and inspection. Sampling and inspection shall be in accordance with MIL-PRF-49462.

4.2 Visual and mechanical inspection. Visual and mechanical inspection shall be in accordance with MIL-PRF-49462.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the 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 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.

6. NOTES

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

6.1 Intended use. Resistors are intended for use in electronic circuits where high voltages and high resistance are required.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of the specification, the applicable associated specification, and complete PIN (see 1.2.1 and 3.1).
- 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).

6.3 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

Review activities:

Army – AR, AT, AV, CR4, MI
Navy – AS, CG, MC, OS
Air Force – 19

(Project 5905-1598-01)