

PERFORMANCE SPECIFICATION  
RESISTORS, FIXED, FILM (INSULATED),  
NONESTABLISHED RELIABILITY, AND ESTABLISHED RELIABILITY,  
GENERAL SPECIFICATION FOR

This amendment forms a part of MIL-PRF-39017F, dated 19 May 1997, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 5

TABLE VI, 2 and 5 percent column, between "15.80" and "16.20", add "16.00".

PAGE 6

2.2.1, STANDARDS, delete "MIL-STD-1276 - Leads for Electronic Component Parts."

2.2.1, STANDARDS, parenthetical source statement, delete "Defense Printing Service Detachment Office" "Customer Service", and substitute "Defense Automated Printing Service, Bldg 4D (DPM-DODSSP)".

PAGE 7

3.4, delete and substitute:

"3.4 Material. Material shall be used which will enable the resistors to meet the performance requirements of this specification. Acceptance or approval of any constituent material shall not be construed as a guarantee of the acceptance of the finished product."

PAGE 8

3.5.3.3, delete and substitute:

"3.5.3.3 Solder dip (retinning) leads. The manufacturer (or their authorized category B or category C distributor) may solder dip/retin the leads of product supplied to this specification provided the solder dip process (see appendix) has been approved by the qualifying activity."

TABLE VII, delete.

PAGE 9

3.5.3.3.1, and 3.5.3.3.2, delete.

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4.6.3.2.4b, second line, delete "3.5.4.1" and substitute "the appendix".

PAGE 22

\* TABLE XIV, subgroup 2, add note "2/"

PAGE 30

FIGURE 3, delete "MATEL" and substitute "METAL".

PAGE 31

4.8.14c, delete "(260°C ±5°C, 10 seconds, no preheat required)".

PAGE 32

4.8.15e, third sentence delete "specified in 4.8.12 and" and substitute "shown in".

PAGE 34

4.8.18f(1), last line, delete "2,0" and substitute "2,000".

PAGE 39

TABLE XVIII, supersedes styles MIL-R-22684 (USAF) column, delete "22864" in three places and substitute "22684" in three places.

TABLE XVIII, 1/, delete "MIL-R-22864" and substitute "MIL-R-22684".

6.9.1, delete "Mil-R-22864/8" and substitute "MIL-R-22684/8".

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2. APPLICABLE DOCUMENTS, delete and substitute:

"2. APPLICABLE DOCUMENTS

"2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 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, 4, and 5 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)

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“STANDARDS

“DEPARTMENT OF DEFENSE

“MIL-STD-1276 - Leads for Electronic Component Parts.”

“(Unless otherwise indicated, copies of the above specifications, 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 associated specifications, specification sheets, or MS sheets), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.”

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After TABLE XXII, add section 5:

“5. SOLDER DIP (RETNING) LEADS

“5.1 Solder dip (retinning) leads. The manufacturer (or their authorized category B or category C distributor) may solder dip/retin the leads of product supplied to this specification provided the solder dip process (see 5.2 of this appendix) or an equivalent process has been approved by the qualifying activity.

“5.2 Qualifying activity approval. Approval of the solder dip process will be based on one of the following options:

“a. When the original lead finish qualified was hot solder dip lead finish 52 of MIL-STD-1276. (NOTE: The 200 microinch maximum thickness is not applicable.) The manufacturer shall use the same solder dip process for retinning as is used in the original manufacture of the product.

“b. When the lead originally qualified was not hot solder dip lead finish 52 of MIL-STD-1276 as prescribed in 5.2a, approval for the process to be used for solder dip shall be based on the following test procedure:

“(1) Thirty samples of any resistance value for each style and lead finish are subjected to the manufacturer’s solder dip process. Following the solder dip process, the resistors are subjected to the dc resistance test (and other group A electricals). No defects are allowed.

“(2) Ten of the 30 samples are then subjected to the solderability test. No defects are allowed.

“(3) The remaining 20 samples are subjected to the resistance to solder heat test followed by the moisture resistance test (or hermetic seal test if the device is hermetically sealed). No defects are allowed.

“(NOTE: Solder dip of gold plated leads is not allowed).”

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“5.3 Solder dip/retraining options. The manufacturer may solder dip/retrain as follows:

“a. After the 100 percent group A screening tests. Following the solder dip/retraining process, the electrical measurements required in group A, subgroup 1, 100 percent screening tests shall be repeated on 100 percent of the lot. (NOTE: The manufacturer may solder dip/retrain prior to the 100 percent electrical measurements of the group A, subgroup 1 tests). The percentage defective allowable (PDA) for the electrical measurements shall be as for the subgroup 1 tests.

“b. As a corrective action, if the lot fails the group A solderability test: The lot may be retrained no more than two times. The lot after retraining shall be 100 percent screened for group A electrical requirements (dc resistance). Any parts failing (lot not exceeding PDA for group A, subgroup 1, see 4.6.3.2.1) these screens shall not be supplied to this specification. If electrical failures exceeding 1 percent of the lot are detected after the second retraining operation, the lot shall not be supplied to this specification.

“c. After the group A inspection has been completed: Following the solder dip/retraining process, the electrical measurements required in group A, subgroup 1, 100 percent screening test shall be repeated on 100 percent of the lot. The PDA for the electrical measurements shall be as for the subgroup 1 tests. Following these tests, the manufacturer shall submit the lot to the group A solderability test as specified in 4.6.3.2.4.”

Custodians:

Army - CR  
Navy - EC  
Air Force - 11  
NASA - NA

Preparing activity:

Army - CR

Agent:

DLA - CC

Review activities:

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

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