

INCH-POUND
MIL-PRF-39005E
AMENDMENT 4
8 August 2002
SUPERSEDING
AMENDMENT 3
2 February 2000

PERFORMANCE SPECIFICATION
RESISTORS, FIXED, WIRE-WOUND (ACCURATE),
NONESTABLISHED RELIABILITY, ESTABLISHED RELIABILITY,
GENERAL SPECIFICATION FOR

This amendment forms a part of MIL-PRF-39005E, dated 9 October 1997, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

- * 1.1, line six; delete "shall".
- * 1.2.1, delete "shall be" and substitute "is".

PAGE 2

- * 1.2.1.3, fifth sentence, delete "shall be" and substitute "are", and in the sixth sentence delete "shall" and substitute "will".

PAGE 4

- * 2.2.1, parenthesis note, delete "Defense Automated Printing Service" and substitute "Document Automation and Production Service".

PAGE 5

- * 3.5.1.1, delete "suitably".
- 3.5.3, first sentence, between "process" and "has" add "(see appendix)".

PAGE 6

3.5.3.1 and 3.5.3.2, delete in their entirety.

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PAGE 10

Add the following new paragraph:

“3.25.1.1 Designation marking of resistance values for resistance tolerances A, B, Q, and T. The designated marking of resistance values for resistance tolerances A, B, Q, and T when used with nonstandard decade resistance values shall be as follows:

- a. The nominal ohmic value shall be marked below the broken line as shown.

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- b. If two lines are used, the nominal ohmic value shall be marked below the last line of the PIN as shown.

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NOTE: Standard marking procedure as shown (see 3.25) where applicable.

PAGE 16

TABLE X, subgroup 2, delete “Short time overload and Thermal shock”.

TABLE X, Note 3/, end of first sentence, add “(see appendix)”.

PAGE 17

4.6.3.2.4.2.b, first sentence, between “process” and “in”, add “(see appendix)”.

PAGE 19

4.6.6.1.1.2, second line, after the word “period” add the word “prior”.

PAGE 22

4.7.5e, delete and substitute:

“Points of application of test voltage for initial resistance tolerance measurement (see 3.1).”

PAGE 32

10.1, first sentence, delete “,with related data,”.

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PAGE 32

30.3, delete and substitute:

"30.3 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 reflowing 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 30.4a, 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 manufacturing 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.

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

"30.4 Solder dip/reflowing options. The manufacturer (or authorized category B or C distributor) may solder dip/reflow as follows:

- a. After the 100 percent group A screening tests. Following the solder dip/reflowing 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/reflow 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 reflowed no more than two times. The lot after reflowing shall be 100 percent screened for group A electrical requirements (dc resistance) and 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 are detected after the second reflowing operation exceeding 1 percent of the lot, the lot shall not be supplied to this specification.
- c. After the group A inspection has been completed. Following the solder dip/reflowing 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 4.7.6."

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Custodians:

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

Review activities:

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

Preparing activity:
Army - CR

Agent:
DLA - CC

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