

INCH-POUND

MIL-PRF-55365D  
AMENDMENT 2  
9 November 2000  
SUPERCEEDING  
AMENDMENT 1  
13 April 1998

## PERFORMANCE SPECIFICATION

### CAPACITOR, FIXED, ELECTROLYTIC (TANTALUM), CHIP, NONESTABLISHED RELIABILITY, ESTABLISHED RELIABILITY, GENERAL SPECIFICATION FOR

This amendment forms a part of MIL-PRF-55365D, dated 3 July 1997, and is approved for use by all Departments and Agencies of the Department of Defense.

#### PAGE 1

Paragraph 1.1, subparagraph b. Change the number 0.0001 percent to 0.001 percent per 1,000 hours.

#### PAGE 13

After paragraph 4.5 add the following paragraph after sentence "g": "In the event that there is no production of a single style ER or non-ER device during a maintenance period and the manufacturer is listed for more than one style on the QPL, a report shall be submitted certifying that the manufacturer still has the capabilities and facilities necessary to produce that product.

For exponential ER product the manufacturer shall still maintain the required number of unit hours in the maintenance period using those styles produced in order to remain qualified to the applicable failure rate levels. In the case where the lowest failure rate for an un-produced style in M, styles need not be manufactured for testing only but the manufacturer must certify that the capability and facilities needed to produce that style are still in place. In the event that units must be built for the purpose of maintaining the required hours, they shall also undergo all required testing prior to being placed on life test. For ER exponential or non-ER parts, if during three consecutive reporting periods there has been no production of a given style, the manufacturer may be required, at the discretion of the qualifying activity, to submit a newly-produced (not from stock) representative product of that style to testing.

For Weibull parts, if during two consecutive reporting periods, there has been no production of the lowest Weibull failure rate level for which the manufacturer is qualified for any QPL style device, the manufacturer may be required, at the discretion of the qualifying activity, to submit a newly-produced (not from stock) representative product of that style to testing to the lowest Weibull failure rate in accordance with qualification inspection requirements.

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Table VI, Subgroup 2, after (physical dimensions only) add "2/"

Below Table VI add the following "2/This can be eliminated if the manufacturer has demonstrated process under the SPC program (see 3.3.1), and has been approved by the qualifying activity. If the design, material, construction, or processing of the part is changed or, there are any quality problems, or failures, the qualifying activity may require resumption of the specified testing. Deletion of testing does not relieve the manufacturer from meeting the test requirement in case of dispute."

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Table VII, Subgroup 2, after (physical dimensions only) add "4/"

Below Table VI add the following "4/This can be eliminated if the manufacturer has demonstrated process under the SPC program (see 3.3.1), and has been approved by the qualifying activity. If the design, material, construction, or processing of the part is changed or, there are any quality problems, or failures, the qualifying activity may require resumption of the specified testing. Deletion of testing does not relieve the manufacturer from meeting the test requirement in case of dispute."

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4.7.4. add the following to the end of the paragraph:

If while taking a DC leakage measurement the limit as specified in the individual slash sheet is exceeded, an automatic verification re-read is allowed and should be taken as the official measurement. This reading should be taken immediately following the first reading after a shorting of the Capacitor and re-electrification of the part for the time required by the specification. Both readings must be reported on the test report.

If this second reading still shows the unit exceeding the limit allowed by the specification, the part is considered a failure. If this second reading shows the part as being within the allowed limit the part is considered as a non-failure and the part will be continued on test."

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4.7.14e, delete and substitute:

"e. Measurements during the exposure: DC leakage at the applicable high test temperature shall be measured as specified in 4.7.4 at 0 hour; 240 hours +72, -24 hours; 1,000 hours, +72, -24 hours; and 2,000 hours, +96, -0 hours."

4.7.14.1, delete and substitute:

"4.7.14.1 Extended life (exponential only). Capacitors shall be tested as specified in 4.7.14, except that the test temperature shall be +85°C, +4°C, -0°C, and the duration of the test shall be 10,000 hours. DC leakage shall be measured as specified in 4.7.4 at +85°C, +4°C, -0°C at 0 hour; 240 hours, +72, -24 hours; 1,000 hours, +72, -24 hours; 2,000 hours, +96, -24 hours; and every 2,000 hours, +96, -24 hours thereafter until 10,000 hours, +120, -0 hour have elapsed. Final measurements shall be as specified in 4.7.14f."

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Paragraph 10.1, line 1, after samples, delete "with related data,".

PAGE 34

Paragraph 30.2; delete in its entirety.

Paragraph 30.3; delete in its entirety.

Custodians:

Army - CR  
Navy - EC  
Air Force - 11

Review activities:

Army - AR, MI  
Navy - AS, CG, MC, OS, SH  
Air Force - 19, 99  
DLA - CC

Preparing activity:

Army - CR

Agent:

DLA - CC

(Project 5910-1997)