

MIL-D-3954C
AMENDMENT 2
29 March 1979
SUPERSEDING
AMENDMENT 1
27 March 1978

MILITARY SPECIFICATION

ELECTRICAL, WAVEGUIDE,
GENERAL SPECIFICATION FOR

This amendment forms a part of Military Specification MIL-D-3954C, dated 19 November 1973, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

- * 2.1, Federal Specifications, add:

"QQ-A-250/1 - Aluminum Alloy 11, Plate and Sheet".

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- * 2.1, Military Specifications, add:

"MIL-B-20148 - Brazing Sheet, Aluminum Alloy".

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- * 3.3, first sentence: Delete and substitute:

"The material for each part shall be as specified herein."

- * 3.3(a): Delete and substitute:

"Aluminum alloy plates and sheets shall conform to composition 6061 of QQ-A-250/11 or composition 1100(2S) of QQ-A-250/1; extruded aluminum alloy shall conform to composition 6063 of QQ-A-200/9 or composition 6061 of QQ-A-250/11."

- * 3.3: Add:

"(f) Aluminum alloy brazing sheets shall conform to Alcoa #11, or equivalent, per class 1 of MIL-B-20148."

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- 4.7.9: Delete and substitute:

"4.7.9 Power dissipation (see 3.12). Unless otherwise specified, the contractor shall certify that the dummy load is capable of dissipating

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the power as indicated in 4.7.9.1. The certificates shall be in the contractor's certified test report to the activity responsible for qualification or to the procuring activity when first article testing is invoked in a contract. When specified (see 3.1 and 6.2(e)), the test shall be in accordance with 4.7.9.1."

Add the following new paragraph:

"4.7.9.1 Power dissipation test (see 3.12). The specified peak and average power shall be applied simultaneously at any one frequency within the specified range (see 3.1). When no peak power is specified, apply 1.5 times rated average power. Power shall be maintained for a period of 15 minutes after the load has reached thermal equilibrium. It is considered that thermal equilibrium has been reached when the temperature of the load has not changed by more than 5°C over a period of 5 minutes. Unless otherwise specified (see 3.1), the internal pressure of the load shall be 20 pounds per square inch gage (psig). For liquid cooled loads, the minimum flow rates and coolant pressure specified (see 3.1) shall be used with the input temperature as specified."

4.7.10: Delete and substitute:

"4.7.10 Endurance (see 3.13). Unless otherwise specified, the contractor shall certify that the dummyload is capable of passing the endurance test as indicated in 4.7.10.1. The certification shall be in the contractor's certified test report to the activity responsible for qualification or to the procuring activity when first article testing is invoked in a contract. When specified (see 3.1 and 6.2(f)), the test shall be in accordance with 4.7.10.1."

Add the following new paragraph:

"4.7.10.1 Endurance test (see 3.13). Dummyloads shall be subjected to the specified peak power (when applicable) and average power for test purposes, for 10 cycles of 1 hour power on and a minimum of 1 hour off, at any frequency within the specified frequency range (see 3.1). The VSWR shall be measured as specified in 4.7.2 (and 4.7.2.1, if applicable) preceding the test, and at interval of 1 hour thereafter during the off period. Unless otherwise specified (see 3.1), the internal pressure of the load shall be 30 psig. For liquid cooled loads, the minimum flow rate and coolant pressure specified (see 3.1) shall be used with the input temperature as specified."

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6.2: Add:

"(e) If power dissipation test is required (see 4.7.9 and 4.7.9.1)."

6.2: Add:

"(f) If endurance test is required (see 4.7.10 and 4.7.10.1)."

NOTE: The margins of this amendment are marked with an asterisk to indicate where changes from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

Custodians:

Army - ER
Navy - EC
Air Force - 85

Preparing activity:
Navy-EC

Agent:
DLA-ES

Review activities:

Army - AR
Navy -
Air Force - 11, 17
DLA - ES

(Project 5985-0918)

User activities:

Army - MI
Navy - AS, CG, MC, OS, SH
Air Force - 19