COMPONENT BULLETIN No. 10

SUPPLEMENTARY MILITARY REQUIREMENTS

FOR FOTP-12

FLUID IMMERSION TEST PROCEDURE

FOR

FIBER OPTIC CONNECTING DEVICES

(FOTP-12 IS PUBLISHED IN RS-455-4)

Electronic Industries Association
Engineering Department
2001 Eye Street, N.W.
Washington, D.C. 20006
NOTICE

EIA Engineering Standards and Publications are designed to serve the public interest through eliminating misunderstandings between manufacturers and purchasers, facilitating interchangeability and improvement of products, and assisting the purchaser in selecting and obtaining with minimum delay the proper product for his particular need. Existence of such Standards and Publications shall not in any respect preclude any member or non-member of EIA from manufacturing or selling products not conforming to such Standards and Publications, nor shall the existence of such Standards and Publications preclude their voluntary use by those other than EIA members, whether the standard is to be used either domestically or internationally.

Recommended Standards and Publications are adopted by EIA without regard to whether or not their adoption may involve patents on articles, materials, or processes. By such action, EIA does not assume any liability to any patent owner, nor does it assume any obligation whatever to parties adopting the Recommended Standard or Publication.

Published by

ELECTRONIC INDUSTRIES ASSOCIATION
Engineering Department
2001 Eye Street, N.W.
Washington, D.C. 20006

PRICE: $3.00

Printed in U.S.A.
FOTP-12

SUPPLEMENTARY REQUIREMENTS

The following supplementary requirements shall apply only when specified by the purchaser in the inquiry, contract, or order, for non-military agencies of the U. S. Government; these supplementary requirements automatically apply whenever FOTP-12 is specified in U. S. military documents or for any U. S. military application.

S1. Applicable Documents

S1.1 The following documents of the issue in effect on date of material purchase form a part of this specification to the extent referenced herein:

S1.1. Federal Specifications: 1
P-D-680 Dry Cleaning Solvent
TT-T-291 Thinner, Paint, Mineral Spirits, Regular and Odorless
TT-I-735 Isopropyl Alcohol

S1.2. Military Specifications: 1
MIL-G-3056 Gasoline, Automotive, Combat
MIL-H-5606 Hydraulic Fluid, Petroleum Base, Aircraft, Missile, and Ordnance
MIL-L-7808 Lubrication Oil, Aircraft Turbine Engine, Synthetic Base
MIL-A-8243 Anti-Icing and Deicing-Defrosting Fluid
MIL-L-23699 Lubricating Oil, Aircraft Turbine Engines, Synthetic Gas
MIL-C-25769 Cleaning Compound, Aircraft Surface, Alkaline Waterbase

S2 Additions, Deletions and Exceptions to RS-455-12, FOTP-12.

S2.1 Test Equipment

Para. 2.1-E. The following supplementary requirement is added:

"Unless otherwise specified, for military applications the test fluids of Table I shall be used. Test temperatures shall be at least 10°C below the flash point of the fluid being used."

1 Available from Naval Publications and Forms Center, 5801 Tabor Ave., Philadelphia, PA 19120, or from the procuring activity or as directed by the contracting officer.
FOTP-12 Supplementary Requirements (Continued)

S2. Additions, Deletions and Exceptions to RS-455-12 (FOTP-12) (Continued)

S2.1 Test Equipment (continued)

Table I. The following table is inserted following Para. 2.1-E and preceding Section 3:

<table>
<thead>
<tr>
<th>Fluid</th>
<th>Test Cycles</th>
<th>Unmated</th>
<th>Mated</th>
<th>Number of cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Condition</td>
<td>Immense</td>
<td>Drain</td>
<td>Oven cure 6 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>±3°C</td>
<td></td>
<td>±3°C</td>
</tr>
<tr>
<td>(a) MIL-H-5606 (hydraulic fluid)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Hydraulic fluid</td>
<td>85°C</td>
<td>100°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) MIL-T-5624 (grade JP-5)</td>
<td>85°C</td>
<td>100°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) MIL-L-7808 (lubricating oil)</td>
<td>25°C</td>
<td>55°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) MIL-L-23699 (lubricating oil)</td>
<td>120°C</td>
<td>125°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) MIL-A-8243 3/ (defrosting fluid)</td>
<td>65°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(g) MIL-L-25769 3/ (diluted for cleaning)</td>
<td>65°C</td>
<td>100°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(h) MIL-G-3056. type I (gasoline)</td>
<td>5 minutes</td>
<td>24 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Isopropyl alcohol per TT-I-735, grade A or B, mixed one part by volume with three parts by volume of mineral spirits per TT-T-291, type I or P-D-680, type I</td>
<td>25°C</td>
<td>in free air</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>(j) 1-1 trichloroethane</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(k) Azeotrope or trichlorotrifluoroethane (Freon TMC or equal) and methylene chloride</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(l) Coolant-dielectric fluid synthetic silicate ester base 2/</td>
<td>30 minutes in oven at 175°C</td>
<td>1 ± 0.1 minute in fluid at room temperature</td>
<td>1 hour minimum in air at room temperature</td>
<td>1</td>
</tr>
</tbody>
</table>

1/ M2-V Chevron oil ST0145LB0001 or equivalent.

2/ Coolanol 25 or equivalent.

3/ Mated connectors.
FOTP 12 Supplementary Requirements (Continued)

S2.2 Test Samples

Para. 3.1-A. The following supplementary requirement is added:

"The cables used shall be of the smallest diameter specified for the connectors and shall be polytetrafluoroethylene jacketed cables only."

Para. 3.1-B. The standard FOTP requirements is deleted and the following is substituted:

"B. An unmated connector terminated in a cable 2 meters (or 6 ft.) long and of minimum diameter specified for the connector. The cables used shall be polytetrafluoroethylene jacketed only."

S2.3 Summary

Para. 6.2-G. The following additional paragraph is added:

"G. Whether samples are assembled or unassembled."