

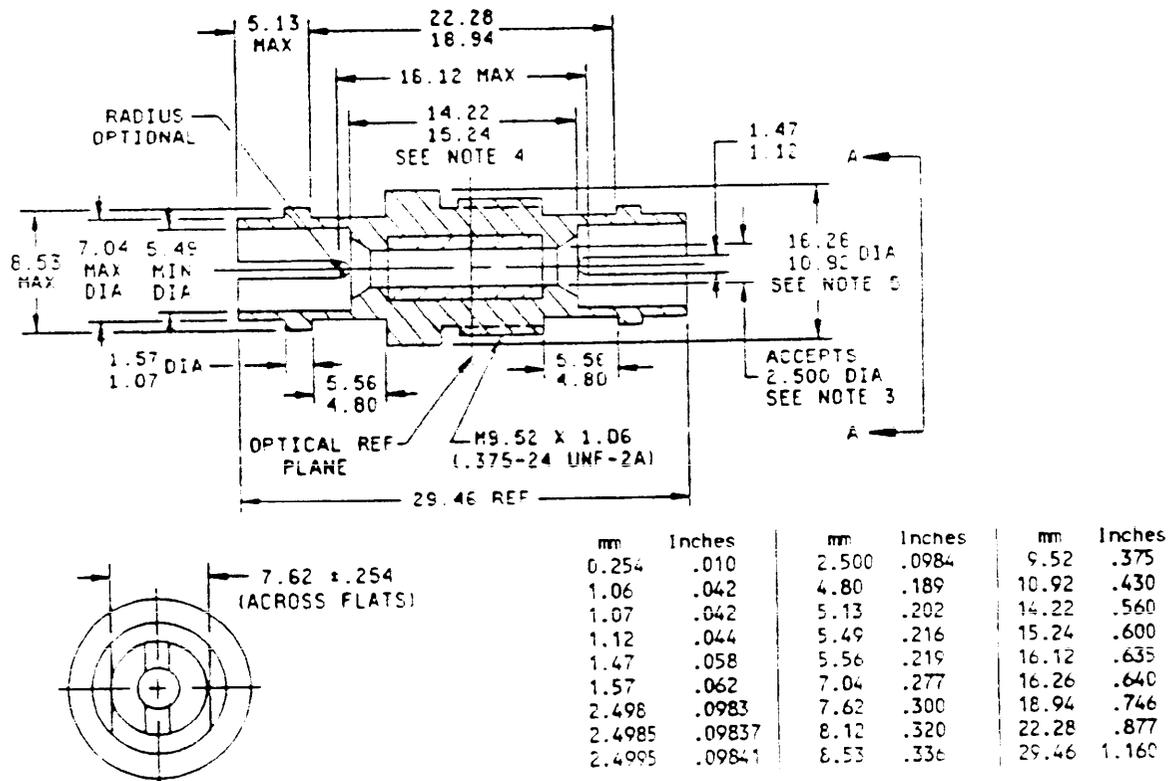
MIL-C-83522/17B  
 11 May 1995  
 SUPERSEDING  
 MIL-C-83522/17A  
 25 June 1992

MILITARY SPECIFICATION SHEET

CONNECTOR, FIBER OPTIC, SINGLE TERMINUS, ADAPTER, BAYONET COUPLING (ST STYLE),  
 2.5 MILLIMETER DIAMETER FERRULE, BULKHEAD PANEL MOUNT

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-C-83522.



NOTES: VIEW A-A

1. Dimensions are in millimeters.
2. Inch equivalents are given for general information only.
3. The adapter is shown with an alignment sleeve which will accept a ferrule diameter of 2.498 to 2.500 mm for MM and 2.4985 to 2.4995 mm for MM/SM.
4. This dimension is the shoulder-to-shoulder distance inside the adapter. This dimension does not apply to the adapter key slot.
5. Adapter may be supplied with a square flange. The dimensions for the sides of the square flange are the same as the diameter of the round flange.

FIGURE 1. Dimensions and configuration.

AMSC N/A

FSC 6060

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

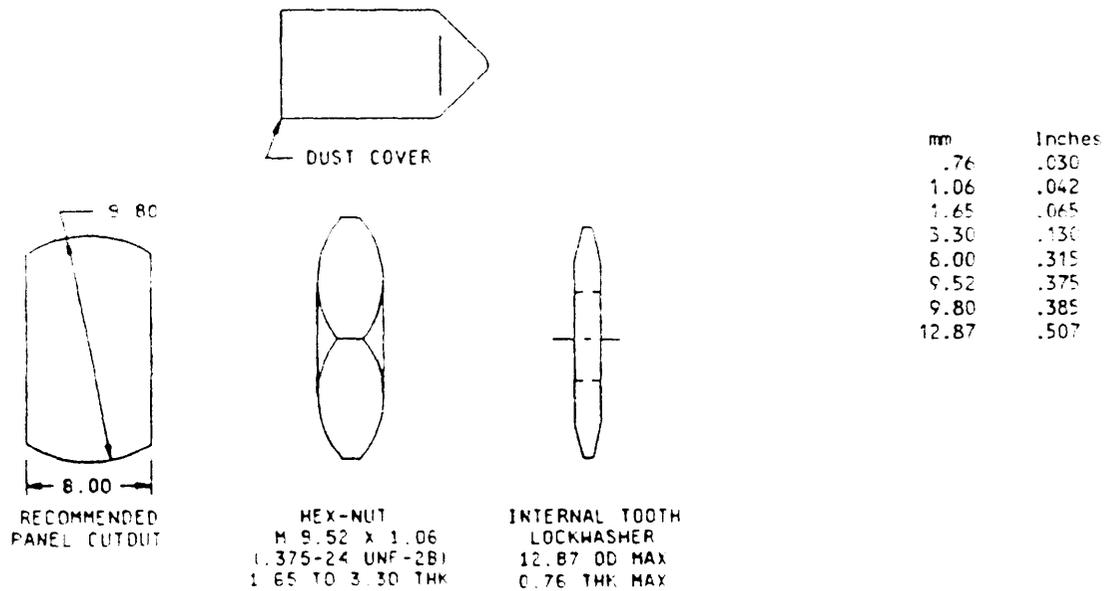


FIGURE 2. Recommended panel cutout and accessories dimensions.

REQUIREMENTS:

Metals: The adapter housing and other metal components shall be of corrosion resistant steel in accordance with QQ-S-763, class 303/316L or ASTM A-276, designation S31803, or nickel-plated brass, alloy 345 or 360, in accordance with ASTM B-16.

Alignment sleeve material: Ceramic (Zirconia).

Dust covers: Shall be thermoplastic and shall be provided on each end of the adapter.

Hex nut and internal tooth lockwasher: Stainless steel or nickel-plated brass.

Dimensions and configuration: See figures 1 and 2.

Optical requirements:

Optical loss (attenuation): Not applicable.

Nuclear radiation: Not applicable.

Weight: 20 grams maximum.

Safety wire holes: Not applicable.

Force to engage and disengage:

Longitudinal force: Not applicable.

Torque: Not applicable.

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Coupling mechanism retention force: Not applicable.

Water submersion: Not applicable.

Fiber optical cable: Not applicable.

Ozone exposure: Not applicable.

Fluid immersion: Not applicable.

High impact shock: Applicable to all adapters. For SM/MM adapters tested with connectors assembled on single-mode fiber, signal discontinuity is not applicable during shock. For MM adapters and SM/MM adapters tested with connectors assembled on multimode fiber, signal discontinuity is applicable during shock.

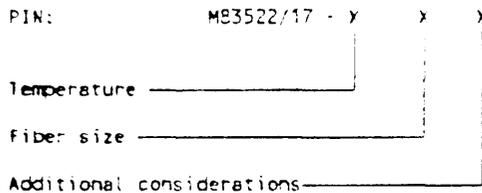
Residual magnetism: Not applicable.

Adapter accessories: Each adapter shall be packaged with a minimum of one hex nut, one internal tooth lockwasher, and two dust covers.

Group A inspection: During group A inspection, all dimensions may be verified on a sampled basis. Weight may also be verified on a sampled basis. The qualifying activity shall be notified of all failures during any sampled inspections.

The adapter mates with two MIL-C-83522/16 plug connectors.

Part or Identifying Number (PIN) is a new term encompassing previous terms used in specifications such as part number, type designator, or identification number.



Temperature:

- H - High temperature
- N - Normal temperature

Fiber size

- X (type I) (125  $\mu$ m, MM)
- Y (type II)(125  $\mu$ m, MM/SM)
- Z (type I) (140  $\mu$ m, MM)

Additional considerations:

- S - Qualified to space flight requirements.

CONCLUDING MATERIAL

Custodians:

- Army - CR
- Navy - SH
- Air Force - 85
- NASA - NA

Preparing activity:

Air Force - 85

Agent:

DLA - ES

Review activities:

- Navy - EC
- Air Force - 17, 19, 80, 90, 99
- DLA - ES

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