

INCH-POUND

MIL-DTL-25707/1C
15 September 2011
SUPERSEDING
MIL-DTL-25707/1B (USAF)
25 July 1999

DETAIL SPECIFICATION SHEET

ANTENNA, FLUSH MOUNT, TYPE AT-740/A

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

The requirements for acquiring the antenna described herein shall consist of this document and MIL-DTL-25707.

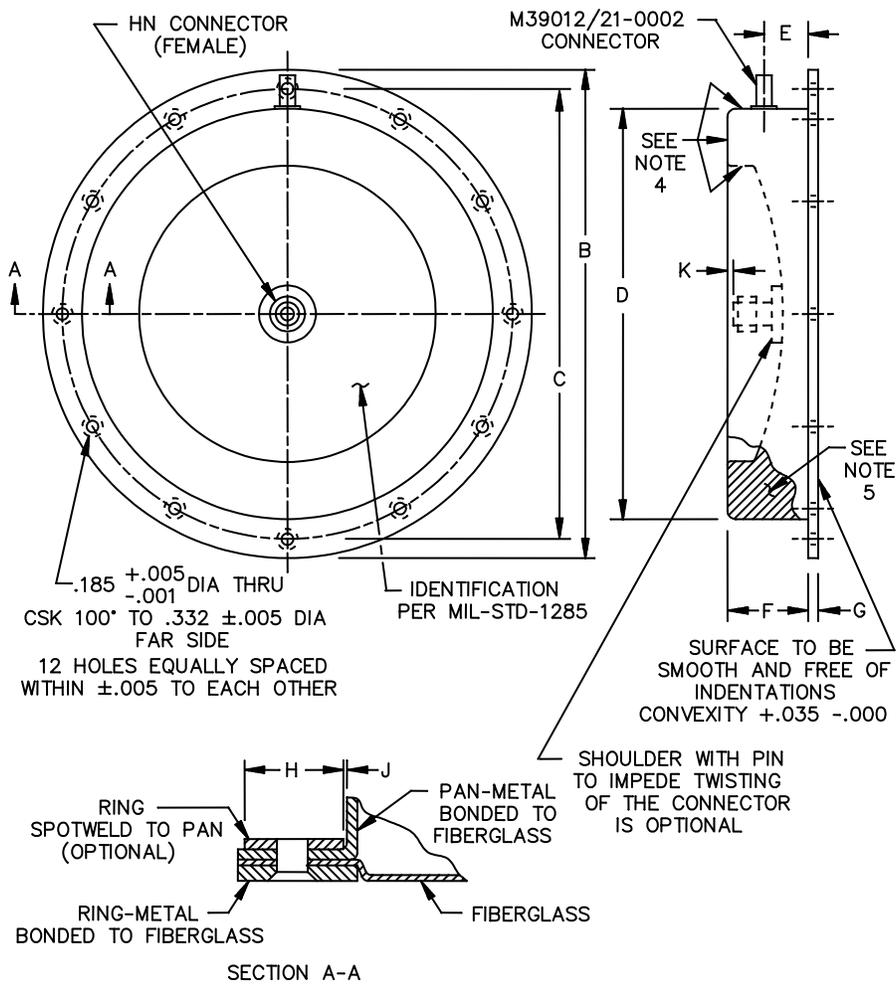


FIGURE 1. Outline drawing antenna AT-740/A.

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Letter	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
B	8.391	8.421	213.13	213.89
C	7.709	7.729	195.81	196.32
D	---	7.109	---	180.57
E	.750	---	19.05	---
F	---	1.520	---	38.61
G	.141	.156	3.58	3.96
H	.60	.72	15.24	18.29
J	.00	.12	0.00	3.05
K	.06	.13	1.52	3.30

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are $\pm .015$ inch (± 0.38 mm) for three place decimals and $\pm .03$ inch (± 0.76 mm) for two place decimals.
4. Finish: Anodize ring in accordance with MIL-A-8625. Chemical conversion coating pan flange; paint pan body with flat white polyurethane enamel or equivalent; radome is to be flat black.
5. Fill antenna cavity with polyurethane foam, or equivalent, with density as necessary to maintain structural rigidity, radiation pattern as specified, and compliance to environmental requirements.

REQUIREMENTS:

Dimensions and construction: See figure 1.

Temperature operating range: -49°C to $+96^{\circ}\text{C}$.

Frequency: 960 MHz to 1,220 MHz.

Impedance: 50 ohms, nominal.

VSWR of antenna: 960 MHz to 1,220 MHz, 1.8:1, maximum.
1,000 MHz to 1,100 MHz, 1.6:1, maximum.

VSWR of sampling probe: 960 MHz to 1,220 MHz, 1.5:1, maximum.

Probe attenuation: $17.5 \text{ dB} \pm 1.5 \text{ dB}$ over frequency band 960 MHz to 1,220 MHz.

Power: 4 kW, peak; 100 watts, average.

Weight: Less than or equal to 16 ounces.

Part or Identifying Number (PIN): M25707/1-01.

Data list: The measured VSWR and attenuation data shall accompany each antenna when required by contract.

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Referenced documents. In addition to MIL-DTL-25707, this specification sheet references the following documents:

MIL-A-8625

MIL-STD-1285

The margins of this specification sheet are marked with vertical lines to indicate where changes from the previous revision 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 issue.

Custodian:
Air Force - 85
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