

INCH-POUND

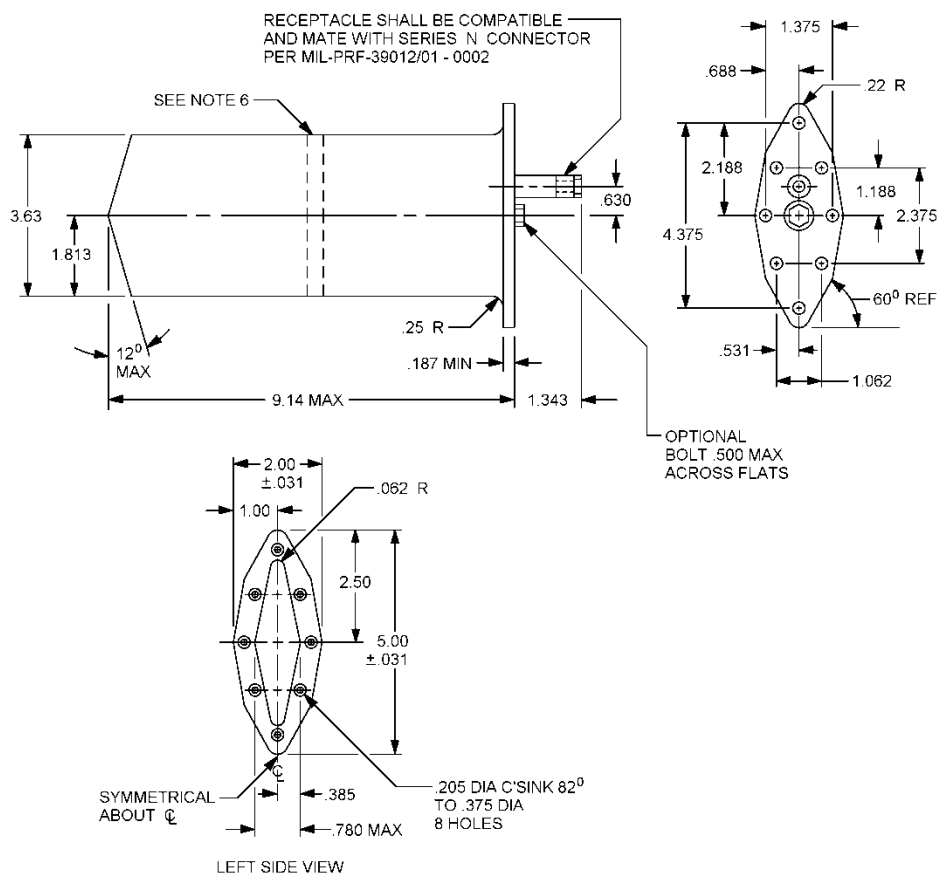
MIL-DTL-5815/1B  
w/AMENDMENT 1  
4 November 2013  
SUPERSEDING  
MIL-DTL-5815/1B  
28 January 2013

## DETAIL SPECIFICATION SHEET

## ANTENNA, BLADE, UHF, AT-256A/ARC (SERIES N CONNECTOR)

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

The requirements for acquiring the antenna described herein  
shall consist of this specification sheet and MIL-DTL-5815.

FIGURE 1. Dimensions and configuration.

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Inches	mm	Inches	mm	Inches	mm	Inches	mm
.003	(.08)	.219	(5.56)	.630	(16.00)	1.813	(46.05)
.005	(.13)	.250	(6.35)	.687	(17.45)	2.000	(50.80)
.010	(.25)	.260	(6.60)	.75	(19.05)	2.187	(55.55)
.030	(.76)	.375	(9.53)	.770	(19.56)	2.375	(60.33)
.031	(.79)	.385	(9.78)	1.062	(26.97)	2.75	(69.85)
.054	(1.37)	.430	(10.92)	1.187	(30.15)	3.625	(92.08)
.062	(1.57)	.500	(12.70)	1.343	(34.11)	4.375	(111.13)
.125	(3.18)	.520	(13.21)	1.375	(34.93)	5.000	(127.00)
.187	(4.75)	.531	(13.49)	1.625	(41.28)	9.014	(228.96)
.205	(5.21)						

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are in parentheses.
3. Metric equivalents are given for general information only.
4. Unless otherwise specified, tolerances are  $\pm 0.005$  (.13 mm) for three place decimals and  $\pm 0.02$  (.51 mm) for two place decimals; tolerances for angles are  $\pm 0.5^\circ$ .
5. Any alternate bolt or bolt head configuration may be used within the cited maximum limits so long as the antenna meets the performance requirements of this specification.
6. The cover may be of a one or two piece construction.

FIGURE 1. Dimensions and configuration - Continued.

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REQUIREMENTS:

Dimensions and configuration: See figure 1.

Class of equipment: Class 2.

Materials:

Base: Aluminum alloy per ASTM B85/B85M Alloy SC84B (ANSI 380.0, UNS alloy A03800).

Cover: Suitable material that will resist erosion of impinging particles at velocities up to Mach 0.95.

Finish: Anodize all aluminum alloy surfaces, with the exception of the surface that interfaces with the skin of aircraft, in accordance with MIL-A-8625, Type I.

Temperature operating range: -54°C to 125°C, and intermittent to 150°C.

Static load: 8 psi applied perpendicular to the blade, with an ultimate of 12 psi.

Frequency range: 225 to 400 MHz.

Characteristic impedance: 50 ohms, nominal.

VSWR: 2:1 maximum, from 225 to 400 MHz.

Radiation power: 50 watts, average.

Polarization test frequency: 315 MHz.

Seal test: 70,000 feet.

Weight: 24 ounces, maximum.

Part number: M5815/1-01.

Referenced documents. In addition to MIL-DTL-5815, this document references the following:

MIL-A-8625

MIL-PRF-39012/1

ASTM-B85/B85M

The margins of this specification sheet are marked with vertical lines to indicate where modifications from this 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.

Custodians:

Air Force – 85

Army – CR

DLA – CC

Preparing activity:

DLA – CC

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Review activities:

Army – AV

Air Force – 99

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