INCH-POUND

MIL-F-3922/63B
W/AMENDMENT 2
8 December 2003
SUPERSEDING
MIL-F-3922/63B
4 May 1976
Amendment 1
18 November 1977

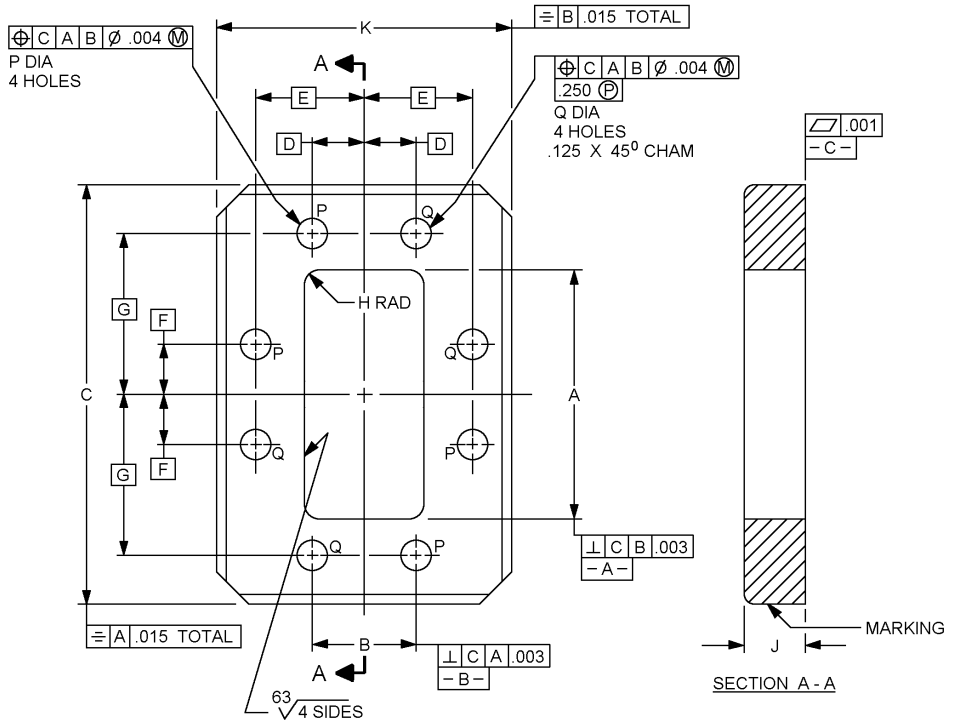
MILITARY SPECIFICATION SHEET

FLANGES, WAVEGUIDE (MINIATURE, UNPRESSURIZED CONTACT), (4 HOLE AND 8 HOLE)

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

The requirements for acquiring the flanges described herein shall consist of this document and the latest issue of MIL-DTL-3922.

This specification sheet is inactive for new design after 18 September 1998.



Inches	mm
.001	0.03
.003	0.08
.004	0.10
.015	0.38
.125	3.18
.250	6.35

NOTES:
1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only (1 inch = 25.4 mm).
3. Roughness of mating surfaces shall not exceed 63 microinches in accordance with ASME-B46.1, except that flaw shall be included in the roughness height measurements.
4. For lettered dimensions, see table I.

FIGURE 1. Flange configuration for PINs 001 through 008.

TABLE I. Dash numbers and dimensions.

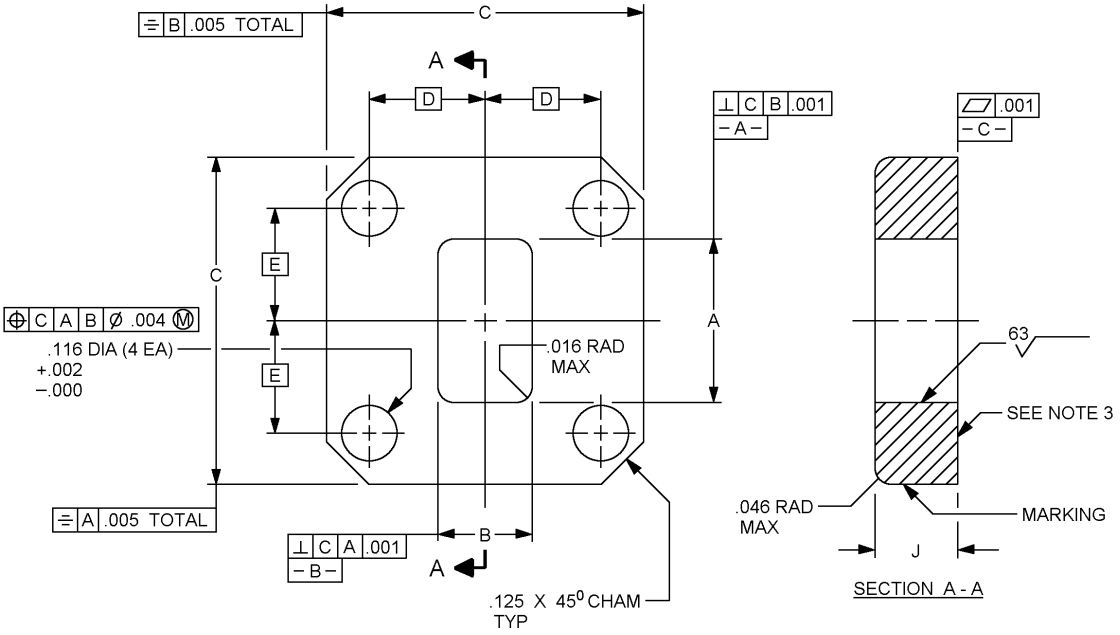
						Dimensions 1/				
Dash no. 2/	Used with Waveguide M85/1-	Used with Mating flange M3922/63-	Dash no. 3/	Used with Waveguide M85/1-	Used with Mating flange M3922/63-	A	B	C	D BSC.	E BSC.
001	051 055	001	005	053 054 174	005	2.002 ±.003 (50.85) (0.08)	1.002 ±.003 (25.45) (0.08)	2.781 ±.015 (70.64) (0.38)	.468 (11.89)	.715 (18.16)
002	063 067	002	006	065 066 176	006	1.503 ±.003 (38.18) (0.08)	.753 ±.003 (19.13) (0.08)	2.281 ±.015 (57.94) (0.38)	.343 (8.71)	.590 (14.99)
003	069 073	003	007	071 072 177	007	1.253 ±.003 (31.83) (0.08)	.628 ±.003 (15.95) (0.08)	2.016 ±.015 (51.21) (0.38)	.280 (7.11)	.517 (13.13)
004	075 079	004	008	077 078 178	008	1.003 ±.003 (25.48) (0.08)	.502 ±.003 (12.75) (0.08)	1.766 ±.015 (44.86) (0.38)	.225 (5.72)	.455 (11.56)
009	107 109	009	010	110 111 183	010	.425 ±.001 (10.80) (0.03)	.255 ±.001 (6.48) (0.03)	.875 ±.005 (22.23) (0.13)	.335 (8.51)	.320 (8.13)

Dash no. 2/	Dash no. 3/	Dimensions F BSC.	G BSC. *	H Max	J	K ±.015 (0.38) *	P +.003 (0.08) -.002 (0.05)	Q
001	005	.405 (10.29)	1.215 (30.86)	.010 (0.25)	.225 ± .025 (5.72) (0.64)	1.781 ± .015 (45.24) (0.38)	.147 (3.73)	(No. 6) .138-32-UNC-2B
002	006	.322 (8.18)	.965 (24.51)	.010 (0.25)	.225 ± .025 (5.72) (0.64)	1.531 + .016 (38.89) (0.41) -.015 (0.38)	.147 (3.73)	(No. 6) .138-32-UNC-2B
003	007	.277 (7.04)	.830 (21.08)	.010 (0.25)	.225 ± .025 (5.72) (0.64)	1.375 ± .015 (34.16) (0.38)	.147 (3.73)	(No. 6) .138-32-UNC-2B
004	008	.235 (5.97)	.705 (17.91)	.010 (0.25)	.225 ± .025 (5.72) (0.64)	1.266 + .015 (32.16) (0.38) -.016 (0.41)	.147 (3.73)	(No. 6) .138-32-UNC-2B
009	010	---	---	---	.187 ± .005 (4.75) (0.13)	---	---	---

1/ Metric equivalents are in parentheses.

2/ Copper alloy.

3/ Aluminum alloy.



Inches	mm	Inches	mm
.001	0.03	.046	1.17
.002	0.05	.112	2.84
.004	0.10	.116	2.95
.005	0.13	.125	3.18
.016	0.41	.138	3.51
.025	0.64	.187	4.75
.031	0.79	.50	12.7

NOTES:

1. Dimensions are in inches.
2. Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. These surfaces to be parallel within .0005 (0.013 mm) to facilitate the use of quick disconnect couplings.
4. Roughness of mating surfaces shall not exceed 63 microinches in accordance with ASME-B46.1, except that flaws shall be included in the roughness height measurement.
5. For lettered dimensions, see table I.

FIGURE 2. Flange configuration for PINs 009 and 010 - Continued.

REQUIREMENTS:

Dimensions and configuration: See figures 1 and 2 and table I.

Material: Metallic alloy as specified in table I.

Marking: See figures 1 and 2.

Part or Identifying Number (PIN): M3922/63- (and dash number from table I).

Items supplied with flange: See table II.

TABLE II. Items supplied with flange.

Item	M3922/63-001, 002, 003, 004, 005, 006, 007, 008	M3922/63-009, 010
Hex head cap screw	(No. 6) .138-32 UNC-2A .50 inch long (4 each)	(No. 4) .112-40 UNC-2A .50 inch long (2 each)
Hex nut	(No. 6) .138-32 UNC-2B (4 each)	(No. 4) .112-40 UNC-2B (2 each)
Spring lockwasher	.138 x .031 (4 each)	.112 x .025 (2 each)

TABLE III. Cross-reference of PIN/AN nomenclature and engineering data.

PIN M3922/63-	AN nomenclature	Frequency range (GHz)
001	UG-1475/U	3.95 - 5.85
002	UG-1476/U	5.85 - 8.20
003	UG-1477/U	7.05 - 10.0
004	UG-1478/U	8.20 - 12.40
005	UG-1480/U	3.95 - 5.85
006	UG-1481/U	5.85 - 8.20
007	UG-1482/U	7.05 - 10.0
008	UG-1483/U	8.20 - 12.40
009	UG-1530/U	22.0 - 33.0
010	---	22.0 - 33.0

NOTES

Referenced documents. In addition to MIL-DTL-3922, this specification sheet references the following documents. (Government documents are available on line at http://assist.daps.mil/quicksearch or www.dodssp.daps.mil or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 1911-5094).

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME-B46.1 - Surface Texture (Surface Roughness, Waviness, and Lay).

(Copies of this document are available from www.asme.org or ASME Information Central Orders/Inquiries, P.O. Box 2300 Fairfield, NJ 07007-2300).

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

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Review activities:
Army - AR, AV, MI
Navy - AS, CG, MC, OS, SH
Air Force - 19, 99

Preparing activity:
DLA - CC

(Project 5985-1284)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at www.dodssp.daps.mil.