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INCH-POUND

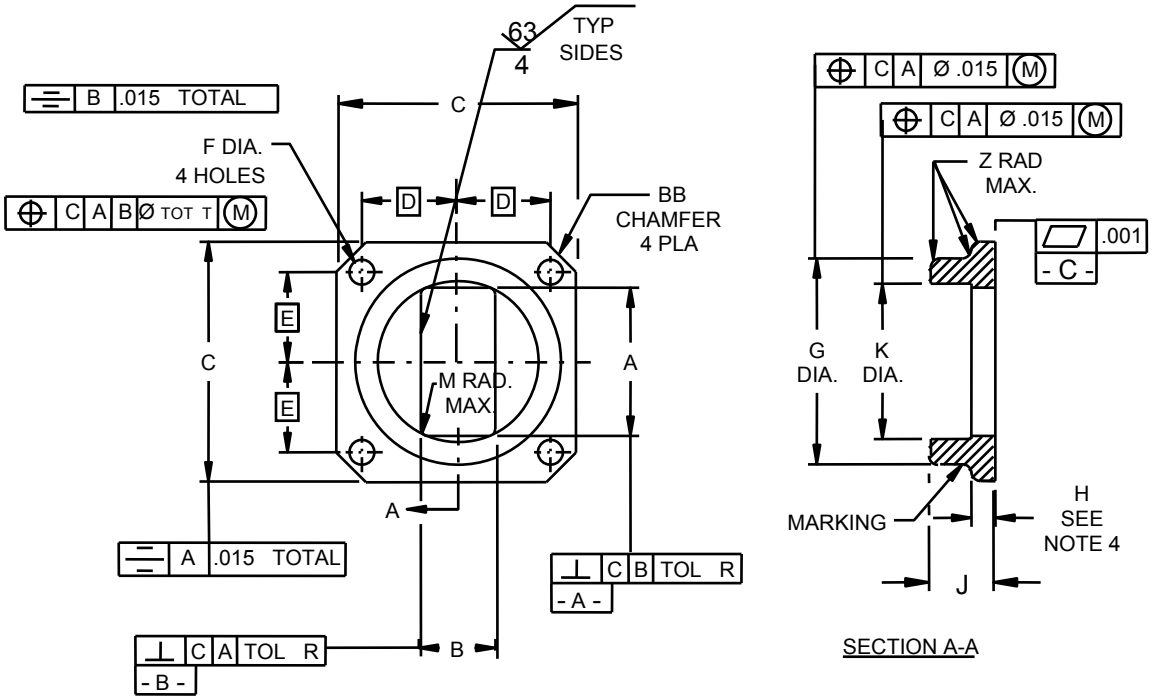
MIL-DTL-3922/53E
8 January 2010
SUPERSEDING
MIL-DTL-3922/53D
6 March 2000

DETAIL SPECIFICATION SHEET

FLANGES, WAVEGUIDE (COVER) (SQUARE, 4 HOLE) (CIRCULAR BACK)

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.



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. Metric equivalents are in parentheses.
4. These surfaces need to be parallel after drilling and reaming for Part or Identifying Numbers (PINs) M3922/53-005 and M3922/53-006 to facilitate the use of quick disconnect couplings.
5. 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.

FIGURE 1. Flange configuration.

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TABLE I. Dash numbers and dimensions.

PIN M3922/53-						Dimensions 1/ 2/ 3/				
Dash	Used with		Dash	Used with						
no. 4/	Waveguide M85/1-	Mating flange M3922/59-	no. 5/	Waveguide M85/1-	Mating flange M3922/59-	A	B	C ±.015 (0.38)	D BSC	E BSC
001	079 075	006	003	077 078 178	008	1.005 +.003 (25.53) (0.08) -.000	.505 +.003 (12.83) (0.08) -.000	1.625 (41.28)	.640 (16.26)	.610 (15.49)
002	073 069	007	004	071 072 177	009	1.255 +.003 (31.88) (0.08) -.000	.630 +.003 (16.00) (0.08) -.000	1.875 (47.63)	.737 (18.72)	.676 (17.17)
005	089 093 087	001	006	090 091 180	002	.706 +.002 (17.93) (0.05) -.000	.395 +.002 (10.03) (0.05) -.000	1.313 (33.35)	.478 (12.14)	.497 (12.62)
007	081 085	010	008	083 084 179	011	.854 +.002 (21.69) (0.05) -.000	.479 +.002 (12.17) (0.05) -.000	1.500 (38.10)	.561 (14.25)	.520 (13.21)
009	079 075	006	010	077 078 178	008	1.005 +.003 (25.53) (0.08) -.000	.505 +.003 (12.83) (0.08) -.000	1.625 (41.28)	.640 (16.26)	.610 (15.49)
011	089 093	001	012	090 091 180	002	.706 +.002 (17.93) (0.05) -.000	.395 +.002 (10.03) (0.05) -.000	1.313 (33.35)	.478 (12.14)	.497 (12.62)
013	081 085	010	014	083 084 179	011	.854 +.002 (21.69) (0.05) -.000	.479 +.002 (12.17) (0.05) -.000	1.500 (38.10)	.561 (14.25)	.520 (13.21)
015	075 079	013	016	077 078 178	014	1.005 +.003 (25.53) (0.08) -.000	.505 +.003 (12.83) (0.08) -.000	1.625 (41.28)	.640 (16.26)	.610 (15.49)
017	087 089 093	---	018	090 091 180	---	.706 +.002 (17.93) (0.05) -.000	.395 +.002 (10.03) (0.05) -.000	1.313 (33.35)	.478 (12.14)	.497 (12.62)

See footnotes at end of table.

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TABLE I. Dash numbers and dimensions - Continued.

Dimensions 1/ 2/ 3/										
Dash no. 4/	Dash no. 5/	F	G Dia. ±.015 (0.38)	H	J ±.015 (0.38)	K Dia. ±.015 (0.38)	M Max R	R	T	Z Max R
001	003	.169 +.003 -.000 (4.29) (0.08)	1.422 (36.12)	.160 ±.010 (6.22) (0.25)	.438 (11.12)	1.062 (26.97)	.046 (1.17)	.0015 (0.04)	.002 (0.05)	.062 (1.57)
002	004	.169 +.003 -.000 (4.29) (0.08)	1.531 (38.89)	.250 ±.015 (6.35) (0.38)	.438 (11.12)	1.312 (33.32)	.031 (0.79)	.0015 (0.04)	"	.062 (1.57)
005	006	.144 +.003 -.000 (3.66) (0.08)	1.000 (25.40)	.125 ±.015 (3.18) (0.38)	.313 (7.95)	---	.010 (0.25)	.001 (0.02)	"	.031 (0.79)
007	008	.144 +.003 -.000 (3.66) (0.08)	1.141 (28.98)	.203 ±.015 (7.89) (0.38)	.391 (9.93)	---	.010 (0.25)	.001 (0.02)	"	.062 (1.57)
009	010	.169 +.003 -.000 (4.29) (0.08)	1.422 (36.19)	.250 ±.015 (6.35) (0.38)	.438 (11.12)	1.062 (26.97)	.046 (1.17)	.0015 (0.04)	"	.062 (1.57)
011	012	.144 +.003 -.000 (3.66) (0.08)	1.000 (25.40)	"	.313 (7.95)	---	.010 (0.25)	.001 (0.02)	"	.031 (0.79)
013	014	.144 +.003 -.000 (3.66) (0.08)	1.141 (28.98)	"	.391 (9.93)	---	.010 (0.25)	.001 (0.02)	"	.062 (1.57)
015	016	.164-32 UNC-2B	1.422 (36.19)	.160 ±.010 (6.22) (0.25)	.438 (11.12)	1.062 (26.97)	.046 (1.17)	.0015 (0.04)	.004 (0.10)	.062 (1.57)
017	018	.138-32 UNC-2B	1.000 (25.40)	.125 ±.015 (3.18) (0.38)	.313 (7.95)	---	.010 (0.25)	.001 (0.02)	.004 (0.10)	.031 (0.79)

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/ Metric equivalents are in parentheses.
4/ Material shall be copper alloy.
5/ Material shall be aluminum alloy.

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REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

Material: Metallic alloy as specified in table I.

Marking: See figure 1.

PIN: M3922/53- (and dash number from table I).

TABLE II. Cross-reference and engineering information.

PIN M3922/53-	AN nomenclature	Frequency range (GHz)
001	UG-39/U	8.20 - 12.40
002	UG-51/U	7.05 - 10.00
003	UG-135/U	8.20 - 12.40
004	UG-138/U	7.05 - 10.00
005	UG-419/U	12.40 - 18.00
006	UG-1665/U	12.40 - 18.00
007	---	10.00 - 15.00
008	---	10.00 - 15.00
009	---	8.20 - 12.40
010	---	8.20 - 12.40
011	---	12.40 - 18.00
012	---	12.40 - 18.00
013	---	10.00 - 15.00
014	---	10.00 - 15.00
015	---	8.20 - 12.40
016	---	8.20 - 12.40
017	---	12.40 - 18.00
018	---	12.40 - 18.00

Referenced documents. In addition to MIL-DTL-3922, this specification sheet references the following documents:
ASME-B46.1

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:
Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5985-2009-035)

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

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 https://assist.daps.dla.mil.