

INCH-POUND

MIL-DTL-3922/54E  
 23 July 2013  
 SUPERSEDING  
 MIL-DTL-3922/54D  
 23 May 2008

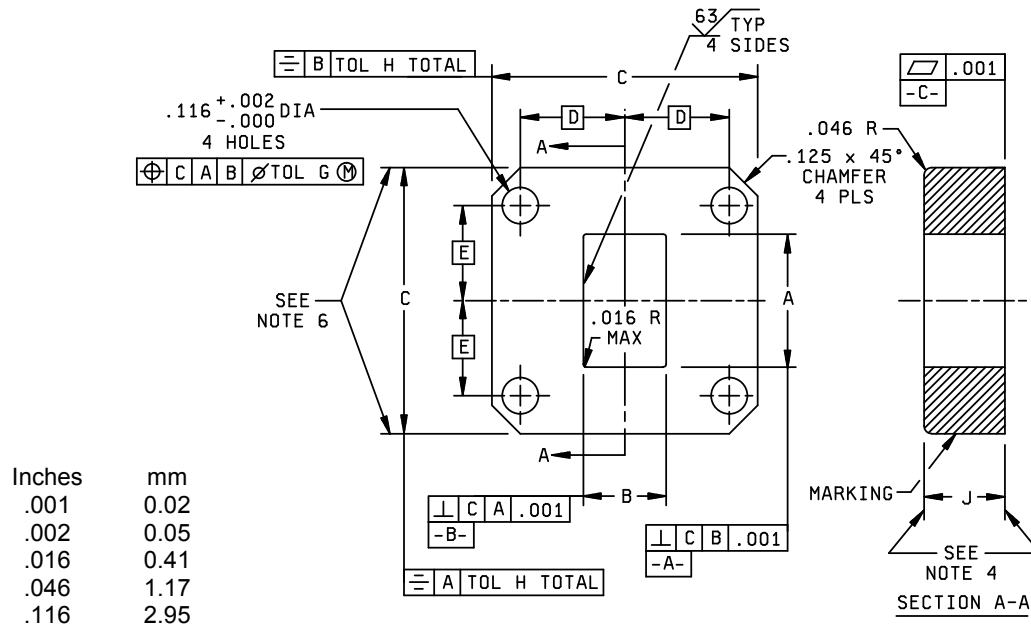
## DETAIL SPECIFICATION SHEET

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

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

INACTIVE FOR NEW DESIGN  
 AFTER 18 SEPTEMBER 1998

Requirements for acquiring the flanges described herein  
 shall consist of this document and MIL-DTL-3922.



## NOTES:

1. Dimensions are in inches. Dimensions are in accordance with ASME-Y14.5M.
2. Millimeter equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. Millimeters are in table.
4. These surfaces to be parallel within .0005 (0.01 mm) to facilitate the use of quick disconnect couplings.
5. Roughness of mating surfaces shall not exceed 63 micro-inches in accordance with ASME-B46.1, except that flaws shall be included in the roughness height measurement.
6. These surfaces to be parallel within .002 for PIN M3922/54-003 only.

FIGURE 1. Flange configuration (-001 through -004).

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TABLE I. Dash numbers 001, 003 and dimensions.

PIN M3922/54-						Dimensions <u>1/</u> <u>2/</u> <u>3/</u>	
Dash no. <u>4/</u>	Used with		Dash no. <u>5/</u>	Used with		A	B
	Waveguide M85/	Mating flange M3922/		Waveguide M85/	Mating flange M3922/		
001	1-102 and 1-106	59-003	002	1-103	59-004	.504 ±.001 (12.80) (0.03)	.254 ±.001 (6.45) (0.03)
003	3-006	59-005				.362 +.002 (9.19) (0.05) -.000	.222 +.002 (5.64) (0.05) -.000

Dimensions <u>1/</u> <u>2/</u> <u>3/</u> - Continued								
Dash no. <u>4/</u>	Dash no. <u>5/</u>	C	D BSC	E BSC	G	H	J	K
001	002	.875 ±.015 (22.22) (0.38)	.335 (8.51)	.320 (8.13)	.002 (0.05)	.015 (0.38)	.188 ± .015 (4.78) (0.38)	.156 (3.96)
003		.750 ±.005 (19.05) (0.13)	.265 (6.73)	.250 (6.35)	.002 (0.05)	.005 (0.13)	.187 ± .005 (4.75) (0.13)	.109 (2.77)

1/ Dimensions are in inches. Dimensions are in accordance with ASME-Y14.5M.2/ Millimeter equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1.00 inch = 25.4 mm.3/ Millimeters are in parentheses.4/ Material shall be copper alloy.5/ Material shall be aluminum alloy.

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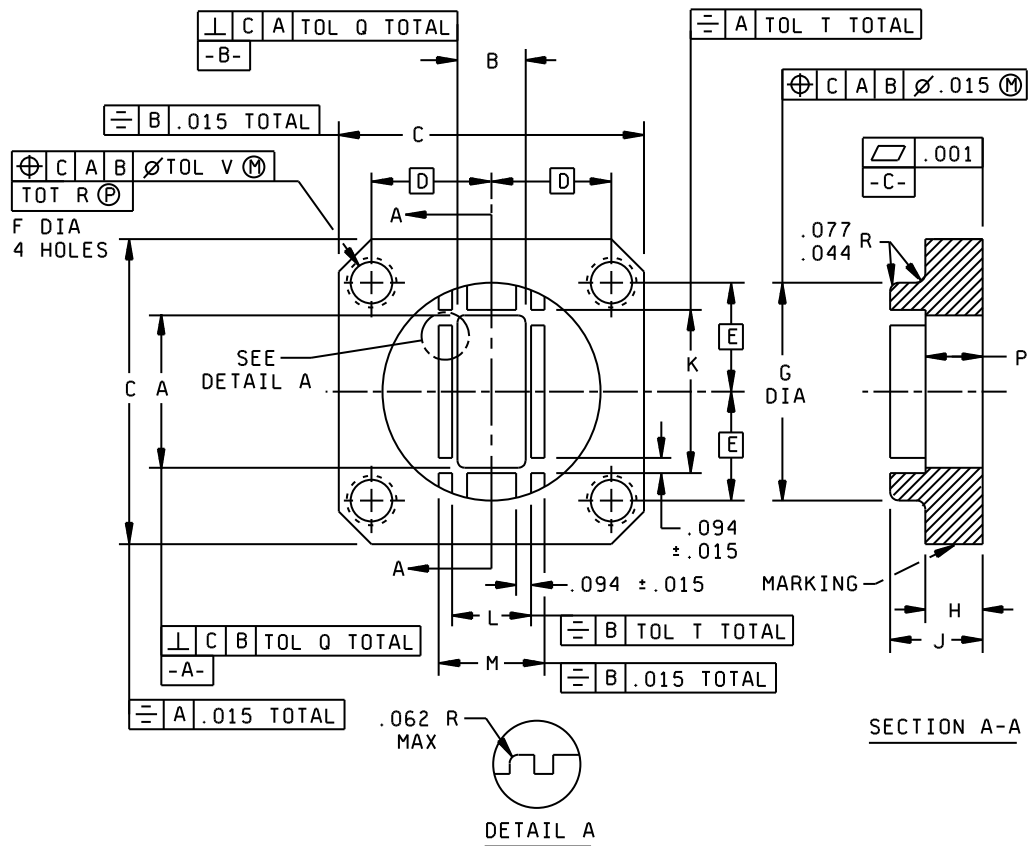
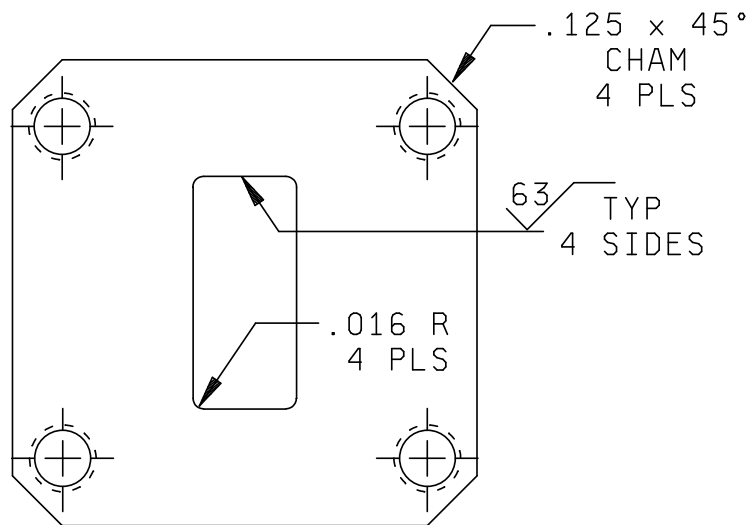


FIGURE 2. Flange configuration (-005 through -016).

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Inches	mm
.001	0.02
.003	0.08
.015	0.38
.016	0.41
.044	1.12
.077	1.96
.094	2.39
.125	3.18

## NOTES:

1. Dimensions are in inches. Dimensions are in accordance with ASME-Y14.5M.
2. Millimeter equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. Millimeters are in table.
4. Roughness of mating surfaces shall not exceed 63 micro-inches in accordance with ASME-B46.1, except that flaws shall be included in the roughness height measurement.

FIGURE 2. Flange configuration (-005 through -016) - Continued.

## MIL-DTL-3922/54E

TABLE II. Dash numbers 005 thru 016 and dimensions.

PIN M3922/54-						Dimensions <u>1/</u> <u>2/</u> <u>3/</u>	
Dash no. <u>4/</u>	Used with		Dash no. <u>5/</u>	Used with		A	B
	Waveguide M85/1-	Mating flange M3922/59-		Waveguide M85/1-	Mating flange M3922/59-		
005	073 069	015	006	071 072 177	016	1.122 ±.004 (28.50) (0.10)	.497 ±.004 (12.62) (0.10)
007	075 079	013	008	077 078 178	014	.900 ±.004 (22.86) (0.10)	.400 ±.004 (10.16) (0.10)
009	089 093	---	010	090 091 180	---	.622 ±.002 (15.80) (0.05)	.311 ±.002 (7.90) (0.05)
011	069 073	007	012	071 072 177	009	1.122 ±.004 (28.50) (0.10)	.497 ±.004 (12.62) (0.10)
013	075 079	006	014	077 078 178	008	.900 ±.004 (22.86) (0.10)	.400 ±.004 (10.16) (0.10)
015	089 093	001	016	090 091 180	002	.622 ±.002 (15.80) (0.05)	.311 ±.002 (7.90) (0.05)

Dimensions <u>1/</u> <u>2/</u> <u>3/</u> - Continued.								
Dash no. <u>4/</u>	Dash no. <u>5/</u>	C ±.015 (0.38)	D BSC	E BSC	F	G ±.015 (0.38)	H	J ±.015 (0.38)
005	006	1.875 (47.62)	.737 (18.72)	.676 (17.17)	.164-32 UNC-2B	1.625 (41.27)	.250 ± .015 (6.35) (0.38)	.625 (15.88)
007	008	1.625 (41.27)	.640 (16.26)	.610 (15.49)	.164-32 UNC-2B	1.422 (36.12)	.160 ± .010 (4.06) (0.25)	.438 (11.12)
009	010	1.312 (33.32)	.478 (12.14)	.497 (12.62)	.138-32 UNC-2B	1.000 (25.40)	.250 ± .015 (6.35) (0.38)	.438 (11.12)
011	012	1.875 (47.62)	.737 (18.72)	.676 (17.17)	.169 + .003 (4.29) (0.08) -.000	1.625 (41.27)	.250 ± .015 (6.35) (0.38)	.625 (15.88)
013	014	1.625 (41.27)	.640 (16.26)	.610 (15.49)	.169 + .003 (4.29) (0.08) -.000	1.422 (36.12)	.160 ± .010 (4.06) (0.25)	.438 (11.12)
015	016	1.312 (33.32)	.478 (12.14)	.497 (12.62)	.144 + .003 (3.66) (0.08) -.000	1.000 (25.40)	.250 ± .015 (6.35) (0.38)	.438 (11.12)

See footnotes at end of table.

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TABLE II. Dash numbers 005 thru 016 and dimensions. - Continued.

Dimensions <u>1/</u> <u>2/</u> <u>3/</u> - Continued.									
Dash no. <u>4/</u>	Dash no. <u>5/</u>	K	L	M Min	P ±.005 (0.13)	Q	R	T	V
005	006	1.253 ± .003 (31.83) (0.08)	.628 ± .003 (15.95) (0.08)	.875 (22.23)	.437 (11.10)	.004 (0.10)	.203 (5.16)	.003 (0.08)	.004 (0.10)
007	008	1.003 ± .003 (25.48) (0.08)	.503 ± .003 (12.78) (0.08)	.750 (19.05)	.312 (7.92)	.003 (0.08)	.250 (6.35)	.003 (0.08)	.004 (0.10)
009	010	.705 ± .002 (17.91) (0.05)	.394 ± .002 (10.01) (0.05)	1.000 (25.40)	.312 (7.92)	.002 (0.05)	---	.002 (0.05)	.004 (0.10)
011	012	1.253 ± .003 (31.83) (0.08)	.628 ± .003 (15.95) (0.08)	.875 (22.23)	.437 (11.10)	.004 (0.10)	---	.003 (0.08)	.002 (0.05)
013	014	1.003 ± .003 (25.48) (0.08)	.503 ± .003 (12.78) (0.08)	.750 (19.05)	.312 (7.92)	.003 (0.08)	---	.003 (0.08)	.002 (0.05)
015	016	.705 ± .002 (17.91) (0.05)	.394 ± .002 (10.01) (0.05)	1.000 (25.40)	.312 (7.92)	.002 (0.05)	---	.002 (0.05)	.002 (0.05)

- 1/ Dimensions are in inches. Dimensions are in accordance with ASME-Y14.5M.  
2/ Millimeter equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.  
3/ Millimeters are in parentheses.  
4/ Materials shall be copper alloy.  
5/ Materials shall be aluminum alloy.

## MIL-DTL-3922/54E

## REQUIREMENTS:

Dimensions and configuration: See figures 1 and 2 and tables I and II.

Material: Metallic alloy as specified in tables I and II.

Marking: See figures 1 and 2.

PIN: M3922/54- (and dash number from tables I and II).

TABLE III. Cross-reference and engineering information.

PIN M3922/54-	AN nomenclature	Frequency range (GHz)
001	UG-595/U	18.0 - 26.5
002	UG-597/U	18.0 - 26.5
003	UG-599/U	26.5 - 40.0
005	---	7.05 - 10.00
006	---	7.05 - 10.00
007	---	8.20 - 12.40
008	---	8.20 - 12.40
009	---	12.40 - 18.00
010	---	12.40 - 18.00
011	---	7.05 - 10.00
012	---	7.05 - 10.00
013	---	8.20 - 12.40
014	---	8.20 - 12.40
015	---	12.40 - 18.00
016	---	12.40 - 18.00

Part M3922/54-004 has been canceled.

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

ASME-B46.1

ASME-Y14.5M

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 5985-2013-031)

## Review activities:

Army - 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.dla.mil/>.