

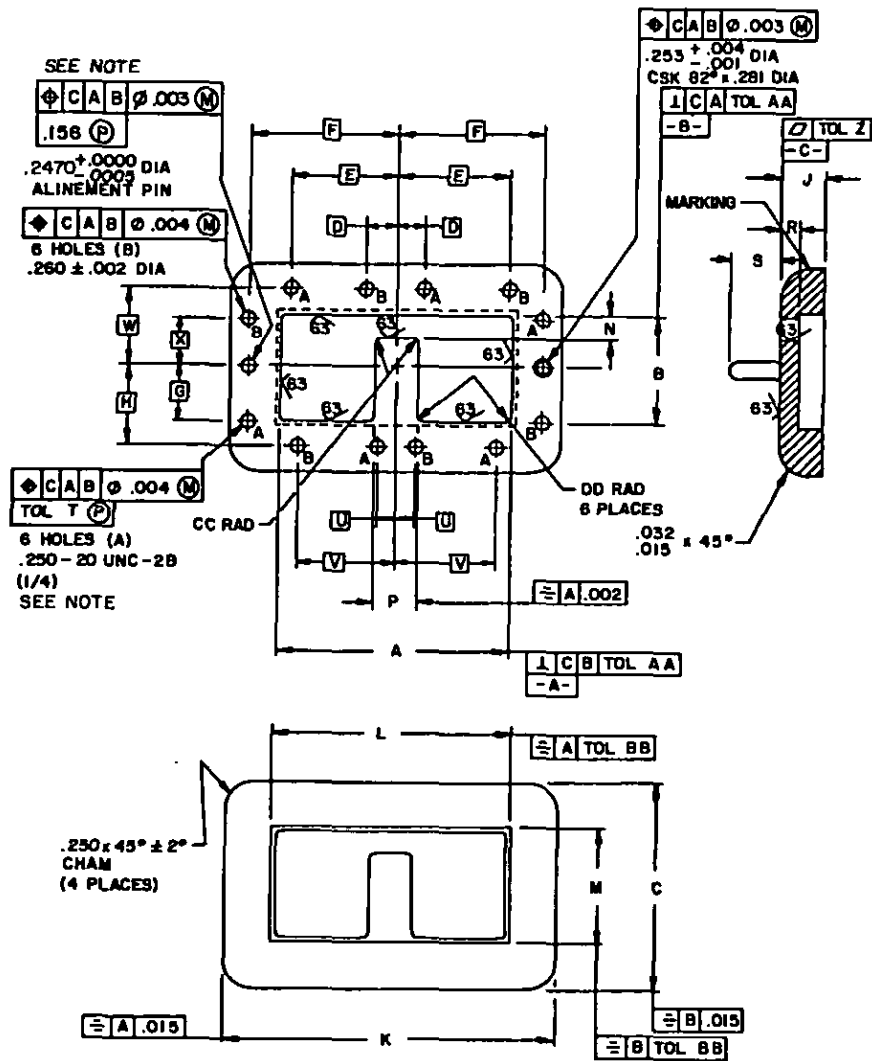
MIL-F-39000/2B  
21 October 1977  
SUPERSEDING  
MIL-F-39000/2A  
10 October 1966

MILITARY SPECIFICATION SHEET

FLANGES, WAVEGUIDE, SINGLE RIDGE, SOCKET MOUNT  
(BANDWIDTH RATIO 3.6:1)

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

The complete requirements for procuring the flanges described herein shall consist of this document and the latest issue of Specification MIL-F-39000.

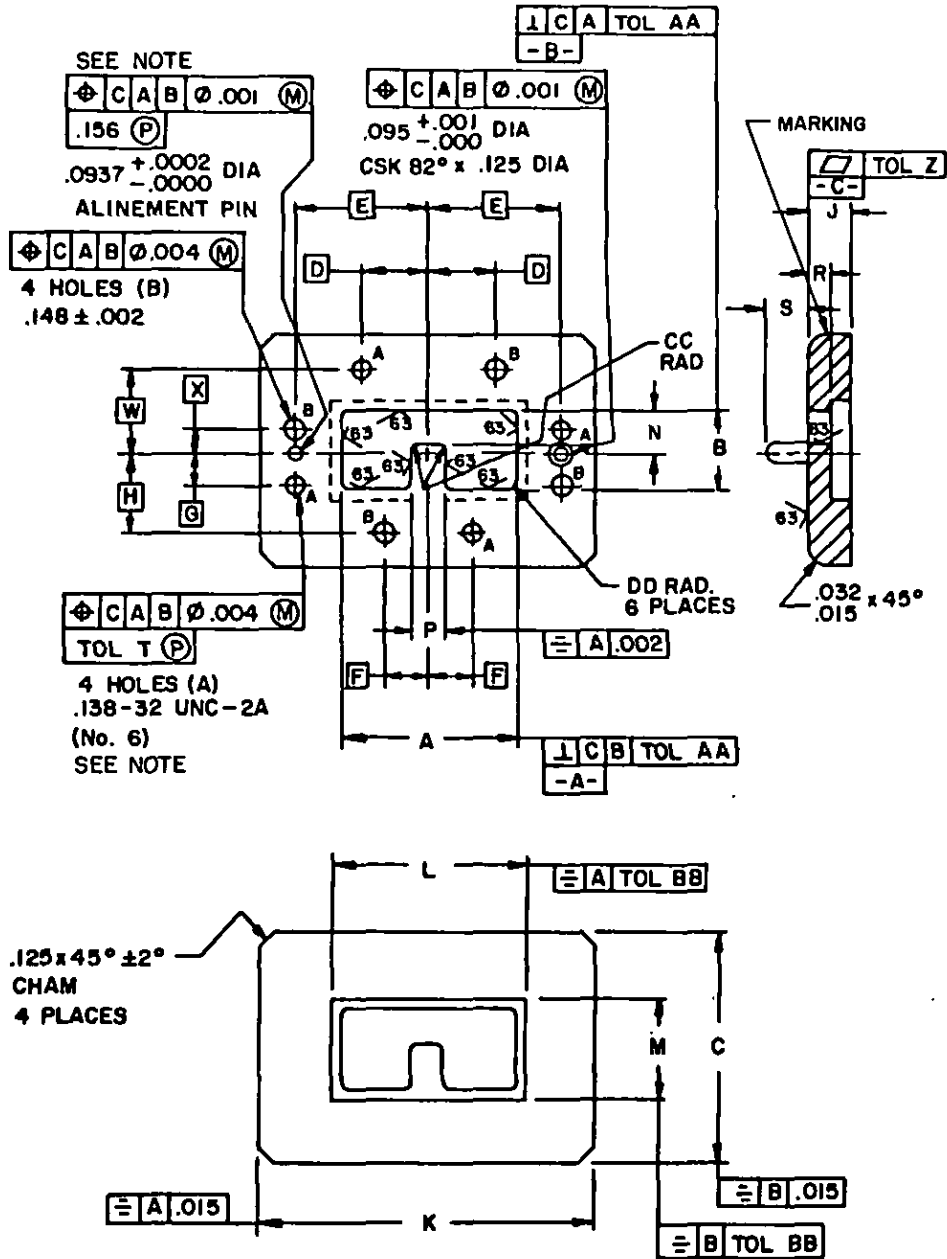


Configuration 1.

FIGURE 1. Flange.

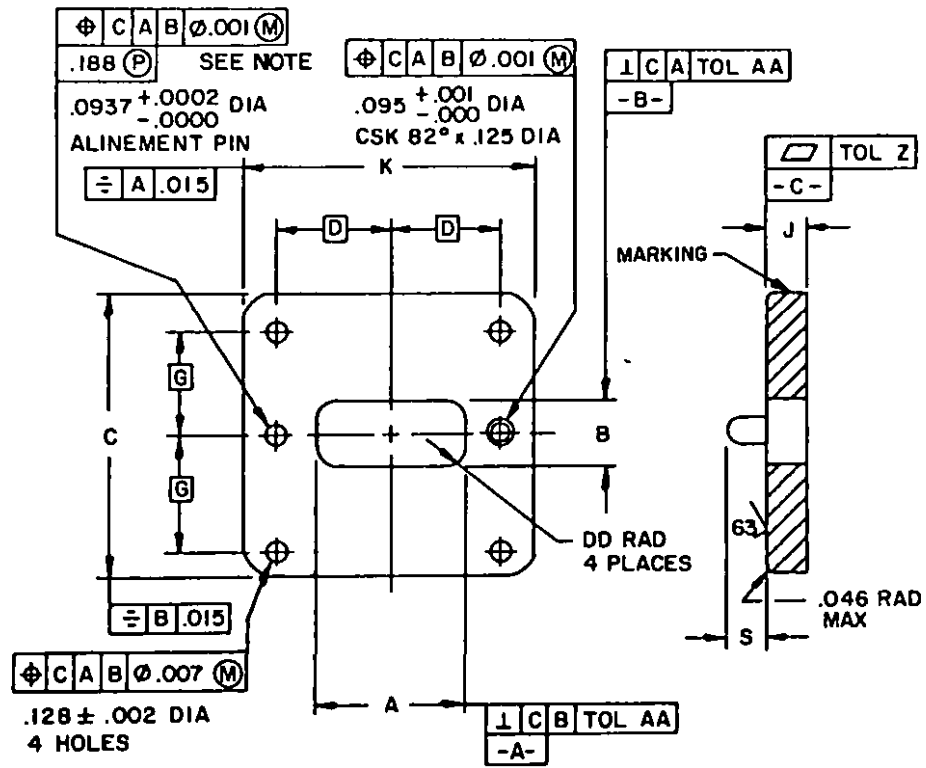
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Configuration 2.

FIGURE 1. Flange - Continued.



Configuration 3.

INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM
.0002	.005	.007	.18	.125	3.18	.247	6.27
.0005	.013	.015	.38	.128	3.25	.250	6.35
.001	.02	.032	.81	.138	3.51	.253	6.43
.002	.05	.046	1.17	.148	3.76	.260	6.60
.003	.08	.0937	2.380	.156	3.96	.281	7.14
.004	.10	.095	2.41	.188	4.77		

NOTE: The projected tolerance zone surface reference is datum C.

FIGURE 1. Flange - Continued.

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TABLE I. Part number characteristics and dimensions.

Part number M39000/2-			Part number M39000/2-			Config- uration	Dimensions 1/ 2/ 3/	
Dash No. 4/	Used with		Dash No. 5/	Used with			A	B
	Waveguide M23351/1-	Mating flange M39000/2-		Waveguide M23351/1-	Mating flange M39000/2-			
001	013	001	002	014, 015, 016	002	1	3.494 ± .004 (88.75) (.10)	1.572 ± .004 (39.93) (.10)
004	017	004	005	018, 019, 020	005	2	2.422 ± .004 (61.52) (.10)	1.090 ± .004 (27.67) (.10)
007	021	007	008	022, 023, 024	008	2	.968 ± .003 (24.59) (.08)	.436 ± .003 (11.07) (.08)
010	025	010	011	026, 027, 028	011	3	.788 ± .002 (20.02) (.05)	.415 ± .002 (10.54) (.05)
013	029	013	014	030, 031, 032	014	3	.362 ± .002 (9.19) (.05)	.212 ± .002 (5.38) (.51)

Dash No. 4/	Dash No. 5/	Dimensions 1/ 2/ 3/								
		C ± .015 (.38)	D BSC.	E BSC.	F BSC.	G BSC.	H BSC.	J ± .015 (.38)	K ± .015 (.38)	L
001	002	3.125 (79.38)	.496 (12.60)	1.602 (40.69)	2.184 (55.47)	.786 (19.96)	1.098 (27.89)	.625 (15.88)	4.875 (123.82)	3.669 ± .005 (93.19) (.13)
004	005	2.062 (52.37)	.753 (19.13)	1.513 (38.43)	.635 (16.13)	.545 (13.84)	.983 (24.97)	.438 (11.13)	3.438 (87.33)	2.595 ± .003 (65.91) (.08)
007	008	1.312 (33.32)	.377 (9.58)	.752 (19.10)	.249 (6.32)	.218 (5.54)	.452 (11.48)	.250 (6.35)	1.875 (47.62)	1.079 ± .002 (27.41) (.05)
010	011	1.375 (34.92)	.312 (7.92)	---	---	.500 (12.70)	---	.188 (4.78)	1.375 (34.92)	---
013	014	.875 (22.22)	.312 (7.92)	---	---	.280 (7.11)	---	.188 (4.78)	.875 (22.22)	---

See footnotes at end of table.

TABLE I. Part number characteristics and dimensions - Continued.

Dash No. 4/	Dash No. 5/	Dimensions 1/ 2/ 3/					
		M	N	P	R ±.005 (.13)	S ±.015 (.38)	T
001	002	1.747 ±.005 (44.37) (.13)	.2690 ±.0015 (6.833) (.038)	.5940 ±.0025 (15.088) (.064)	.250 (6.35)	.156 (3.96)	.625 (15.88)
004	005	1.263 ±.003 (32.08) (.08)	.186 ±.001 (4.72) (.03)	.412 ±.002 (10.46) (.05)	.250 (6.35)	.156 (3.96)	.438 (11.13)
007	008	.547 ±.002 (13.89) (.05)	.0750 ±.0005 (1.905) (.013)	.165 ±.001 (4.19) (.03)	.125 (3.18)	.156 (3.96)	.250 (6.35)
010	011	---	---	---	---	.156 (3.96)	---
013	014	---	---	---	---	.156 (3.96)	---

Dash No. 4/	Dash No. 5/	Dimensions 1/ 2/ 3/								
		U BSC.	V BSC.	W	X	Z	AA	BB	CC ±10%	DD Max.
001	002	.283 (7.19)	1.452 (36.88)	1.214 (30.84)	.821 (20.85)	.0007 (.018)	.004 (.10)	.005 (.13)	.134 (3.40)	.047 (1.19)
004	005	---	---	.932 (23.67)	.366 (9.30)	.0007 (.018)	.004 (.10)	.003 (.08)	.037 (.94)	.047 (1.19)
007	008	---	---	.469 (11.91)	.107 (2.72)	.0004 (.010)	.003 (.08)	.002 (.05)	.015 (.38)	.031 (.79)
010	011	---	---	---	---	.0003 (.008)	.002 (.05)	---	---	.070 (1.78)
013	014	---	---	---	---	.0003 (.008)	.002 (.05)	---	---	.060 (1.52)

1/ Dimensions are in inches.

2/ Metric equivalents 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 aluminum alloy.

5/ Material shall be copper alloy.

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## REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

Material: See table I.

Materials supplied with flanges: See table II.

Marking:

Part number: M39000/2-(dash number from table I).

Location: See figure 1.

Cross reference and frequency range: See table III.

TABLE II. Items supplied with flanges.

Flange part No. M39000/2-	Socket head cap screw	Hex nut	Spring lockwasher
001, 002	.250-20 UNC-2A 1.50 in. long (6 ea)	---	.250 x .062 (6 ea)
004, 005	.138-32 UNC-2A 1.0 in. long (4 ea)	---	.138 x .031 (4 ea)
007, 008	.138-32 UNC-2A .625 in. long (4 ea)	---	.138 x .031 (4 ea)
010, 011, 013, 014	.112-40 UNC-2A .50 in. long (2 ea)	.112-40 UNC-2B (2 ea)	.112 x .025 (2 ea)

TABLE III. Cross reference and frequency range.

Part number <sup>1/</sup> M39000/2-	AN nomenclature	Frequency range (GHz)
001	UG-1604/U	.97- 3.50
002	UG-1605/U	.97- 3.50
004	UG-1607/U	1.40- 5.00
005	UG-1608/U	1.40- 5.00
007	UG-1610/U	3.50-12.40
008	UG-1611/U	3.50-12.40
010	UG-1613/U	5.00-18.00
011	UG-1614/U	5.00-18.00
013	UG-1616/U	12.40-40.00
014	UG-1617/U	12.40-40.00

<sup>1/</sup> Dash numbers 003 (UG-1606/U), 006 (UG-1609/U), 009 (UG-1612/U), 012 (UG-1615/U), and 015 (UG-1618/U) have been deleted from specifications.

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Custodians:

Army - EL  
Navy - EC  
Air Force - 85

Review activities:

Army -  
Navy - SH  
Air Force - 11, 99  
DLA - ES

User activities:

Army - AV, AR  
Navy - MC, AS, OS, SH, CG  
Air Force - 14, 19

Preparing activity:

Navy - EC

Agent:

DLA - ES

(Project 5985-0854-2)

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