

DETAIL SPECIFICATION SHEET

WAVEGUIDE ASSEMBLIES, FLEXIBLE, NONTWISTABLE,
CLASS 2

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

The requirements for acquiring the waveguide assemblies described
herein shall consist of this specification sheet and of MIL-DTL-287.

REQUIREMENTS: See table I.

Part or Identifying Number (PIN): See table I.

First article approval by similarity: First article approval obtained for one waveguide assembly shall, with
acquiring activity approval, enable first article approval for other waveguide assemblies as specified in table
II.

Cross reference information: See table III.

Substitution data: See table IV.

TABLE I. Flexible, nontwistable waveguide assemblies.

Group number	1/ PIN M287/4-	TE ₁₀ mode frequency range (GHz)	Minimum centerline bending radius (inch)		Insertion loss (db/ft)	Pressurization (lb/in ²) gage	2/ VSWR (max) at			
			E plane	H plane			12"	24"	36"	>36"
I	01-XXXX	1.12 - 1.70	13.02	27.07	0.01	15	1.05	1.06	1.07	1.10
	02-XXXX	1.12 - 1.70	13.02	27.07	0.01	15	1.05	1.06	1.07	1.10
	03-XXXX	1.12 - 1.70	13.02	27.07	0.01	15	1.05	1.06	1.07	1.10
	64-XXXX	1.12 - 1.70	13.02	27.07	0.01	15	1.05	1.06	1.07	1.10
I	04-XXXX	1.70 - 2.60	9.51	14.00	0.015	20	1.06	1.07	1.08	1.10
	05-XXXX	1.70 - 2.60	9.51	14.00	0.015	20	1.06	1.07	1.08	1.10
	66-XXXX	1.70 - 2.60	9.51	14.00	0.015	20	1.06	1.07	1.08	1.10
I	06-XXXX	2.20 - 3.30	5.00	9.75	0.018	25	1.06	1.07	1.08	1.10
	07-XXXX	2.20 - 3.30	5.00	9.75	0.018	25	1.06	1.07	1.08	1.10
	66-XXXX	2.20 - 3.30	5.00	9.75	0.018	25	1.06	1.07	1.08	1.10
I	08-XXXX	2.60 - 3.95	4.50	6.38	0.02	30	1.08	1.09	1.10	1.12
	09-XXXX	2.60 - 3.95	4.50	6.38	0.02	30	1.08	1.09	1.10	1.12
	10-XXXX	2.60 - 3.95	4.50	6.38	0.02	30	1.08	1.09	1.10	1.12
	11-XXXX	2.60 - 3.95	4.50	6.38	0.02	30	1.08	1.09	1.10	1.12
	12-XXXX	2.60 - 3.95	4.50	6.38	0.02	30	1.08	1.09	1.10	1.12
	13-XXXX	2.60 - 3.95	4.50	6.38	0.02	30	1.08	1.09	1.10	1.12
	14-XXXX	2.60 - 3.95	4.50	6.38	0.02	30	1.08	1.09	1.10	1.12
	15-XXXX	2.60 - 3.95	4.50	6.38	0.02	30	1.08	1.09	1.10	1.12
	67-XXXX	2.60 - 3.95	4.50	6.38	0.02	30	1.08	1.09	1.10	1.12
II	16-XXXX	3.95 - 5.85	3.00	5.50	0.03	30	1.08	1.09	1.10	1.12
	17-XXXX	3.95 - 5.85	3.00	5.50	0.03	30	1.08	1.09	1.10	1.12
	18-XXXX	3.95 - 5.85	3.00	5.50	0.03	30	1.08	1.09	1.10	1.12
	19-XXXX	3.95 - 5.85	3.00	5.50	0.03	30	1.08	1.09	1.10	1.12
	20-XXXX	3.95 - 5.85	3.00	5.50	0.03	30	1.08	1.09	1.10	1.12
	21-XXXX	3.95 - 5.85	3.00	5.50	0.03	30	1.08	1.09	1.10	1.12
	22-XXXX	3.95 - 5.85	3.00	5.50	0.03	30	1.08	1.09	1.10	1.12
	23-XXXX	3.95 - 5.85	3.00	5.50	0.03	30	1.08	1.09	1.10	1.12
	68-XXXX	3.95 - 5.85	3.00	5.50	0.03	30	1.08	1.09	1.10	1.12
II	24-XXXX	5.85 - 8.20	2.50	5.00	0.05	30	1.08	1.09	1.10	1.12
	25-XXXX	5.85 - 8.20	2.50	5.00	0.05	30	1.08	1.09	1.10	1.12
	26-XXXX	5.85 - 8.20	2.50	5.00	0.05	30	1.08	1.09	1.10	1.12
	27-XXXX	5.85 - 8.20	2.50	5.00	0.05	30	1.08	1.09	1.10	1.12
	28-XXXX	5.85 - 8.20	2.50	5.00	0.05	30	1.08	1.09	1.10	1.12
	29-XXXX	5.85 - 8.20	2.50	5.00	0.05	30	1.08	1.09	1.10	1.12
	30-XXXX	5.85 - 8.20	2.50	5.00	0.05	30	1.08	1.09	1.10	1.12
	31-XXXX	5.85 - 8.20	2.50	5.00	0.05	30	1.08	1.09	1.10	1.12
	32-XXXX	5.85 - 8.20	2.50	5.00	0.05	30	1.08	1.09	1.10	1.12
II	69-XXXX	5.85 - 8.20	2.50	5.00	0.05	30	1.08	1.09	1.10	1.12
	33-XXXX	7.05 - 10.0	1.75	3.49	0.06	45	1.12	1.14	1.15	1.18
	34-XXXX	7.05 - 10.0	1.75	3.49	0.06	45	1.12	1.14	1.15	1.18
	35-XXXX	7.05 - 10.0	1.75	3.49	0.06	45	1.12	1.14	1.15	1.18
	36-XXXX	7.05 - 10.0	1.75	3.49	0.06	45	1.12	1.14	1.15	1.18
	37-XXXX	7.05 - 10.0	1.75	3.49	0.06	45	1.12	1.14	1.15	1.18
	38-XXXX	7.05 - 10.0	1.75	3.49	0.06	45	1.12	1.14	1.15	1.18
	39-XXXX	7.05 - 10.0	1.75	3.49	0.06	45	1.12	1.14	1.15	1.18
	40-XXXX	7.05 - 10.0	1.75	3.49	0.06	45	1.12	1.14	1.15	1.18
II	70-XXXX	7.05 - 10.0	1.75	3.49	0.06	45	1.12	1.14	1.15	1.18
	41-XXXX	7.0 - 11.0	1.44	2.50	0.08	50	1.12	1.14	1.15	1.18
	42-XXXX	7.0 - 11.0	1.44	2.50	0.08	50	1.12	1.14	1.15	1.18
II	71-XXXX	7.0 - 11.0	1.44	2.50	0.08	50	1.12	1.14	1.15	1.18
	43-XXXX	8.2 - 12.4	1.38	3.00	0.1	60	1.14	1.15	1.16	1.18
	44-XXXX	8.2 - 12.4	1.38	3.00	0.1	60	1.14	1.15	1.16	1.18
	45-XXXX	8.2 - 12.4	1.38	3.00	0.1	60	1.14	1.15	1.16	1.18
	46-XXXX	8.2 - 12.4	1.38	3.00	0.1	60	1.14	1.15	1.16	1.18
	47-XXXX	8.2 - 12.4	1.38	3.00	0.1	60	1.14	1.15	1.16	1.18
	48-XXXX	8.2 - 12.4	1.38	3.00	0.1	60	1.14	1.15	1.16	1.18
	49-XXXX	8.2 - 12.4	1.38	3.00	0.1	60	1.14	1.15	1.16	1.18
	50-XXXX	8.2 - 12.4	1.38	3.00	0.1	60	1.14	1.15	1.16	1.18
II	72-XXXX	8.2 - 12.4	1.38	3.00	0.1	60	1.14	1.15	1.16	1.18

See footnotes at end of table I.

TABLE I. Flexible, nontwistable waveguide assemblies - Continued.

Flexure (degrees/ft) 1x10 ⁵ cycles		Jacket material	Retention force (lb _f)	Operating temp range -55°C to	Mates with standard rigid waveguide M85/1-	Flanges		
E plane	H plane					Flange 1 M3922/()	Flange 2 M3922/()	Material 3/
12.8	6.4	Neoprene	N/A	+100°C	017	58-007 (contact)	58-007 (contact)	Cu
12.8	6.4	Neoprene	N/A	+100°C	018	58-008 (contact)	58-008 (contact)	Al
12.8	6.4	Plastic	N/A	+65 °C	017	58-007 (contact)	58-007 (contact)	Cu
4/	4/	Neoprene	N/A	+100°C	017	58-007 (contact)	58-007 (contact)	Cu
19.0	9.5	Neoprene	N/A	+100°C	031	58-009 (contact)	58-009 (contact)	Cu
19.0	9.5	Neoprene	N/A	+100°C	029	58-010 (contact)	58-010 (contact)	Al
4/	4/	Neoprene	N/A	+100°C	031	58-009 (contact)	58-009 (contact)	Cu
22.0	11.0	Neoprene	N/A	+100°C	037	58-011 (contact)	58-011 (contact)	Cu
22.0	11.0	Neoprene	N/A	+100°C	035	58-012 (contact)	58-012 (contact)	Al
4/	4/	Neoprene	N/A	+100°C	037	58-011 (contact)	58-011 (contact)	Cu
24.50	12.25	Neoprene	N/A	+100°C	043	64-001 (contact)	64-001 (contact)	Cu
24.50	12.25	Neoprene	N/A	+100°C	041	64-002 (contact)	64-002 (contact)	Al
24.50	12.25	Neoprene	N/A	+100°C	043	56-001 (cover)	56-001 (cover)	Cu
24.50	12.25	Neoprene	N/A	+100°C	041	56-002 (cover)	56-002 (cover)	Al
24.50	12.25	Neoprene	N/A	+100°C	043	61-002 (choke)	56-001 (cover)	Cu
24.50	12.25	Neoprene	N/A	+100°C	041	61-001 (choke)	56-002 (cover)	Al
24.50	12.25	Neoprene	N/A	+100°C	043	61-002 (choke)	61-002 (choke)	Cu
24.50	12.25	Neoprene	N/A	+100°C	041	61-001 (choke)	61-001 (choke)	Al
4/	4/	Neoprene	N/A	+100°C	043	64-001 (contact)	64-001 (contact)	Cu
43.0	21.5	Neoprene	N/A	+100°C	055	63-001 (contact)	63-001 (contact)	Cu
43.0	21.5	Neoprene	N/A	+100°C	053	63-005 (contact)	63-005 (contact)	Al
43.0	21.5	Neoprene	N/A	+100°C	055	57-002 (cover)	57-002 (cover)	Cu
43.0	21.5	Neoprene	N/A	+100°C	053	57-001 (cover)	57-001 (cover)	Al
43.0	21.5	Neoprene	N/A	+100°C	055	62-002 (choke)	57-002 (cover)	Cu
43.0	21.5	Neoprene	N/A	+100°C	053	62-001 (choke)	57-001 (cover)	Al
43.0	21.5	Neoprene	N/A	+100°C	055	62-002 (choke)	62-002 (choke)	Cu
43.0	21.5	Neoprene	N/A	+100°C	053	62-001 (choke)	62-001 (choke)	A
4/	4/	Neoprene	N/A	+100°C	055	63-001 (contact)	63-001 (contact)	Cu
69.0	34.5	Neoprene	N/A	+100°C	067	63-002 (contact)	63-002 (contact)	Cu
69.0	34.5	Neoprene	N/A	+100°C	065	63-006 (contact)	63-006 (contact)	Al
69.0	34.5	Neoprene	N/A	+100°C	067	55-001 (cover)	55-001 (cover)	Cu
69.0	34.5	Neoprene	N/A	+100°C	065	55-002 (cover)	55-002 (cover)	Al
69.0	34.5	Neoprene	N/A	+100°C	067	60-001 (choke)	55-001 (cover)	Cu
69.0	34.5	Neoprene	N/A	+100°C	065	60-002 (choke)	55-002 (cover)	Al
69.0	34.5	Neoprene	N/A	+100°C	067	60-001 (choke)	60-001 (choke)	Cu
69.0	34.5	Neoprene	N/A	+100°C	065	60-002 (choke)	60-002 (choke)	Al
69.0	34.5	Fluorosilicone rubber	N/A	+125°C	065	63-006 (contact)	63-006 (contact)	Al
4/	4/	Neoprene	N/A	+100°C	067	63-002 (contact)	63-002 (contact)	Cu
98.50	49.25	Neoprene	N/A	+100°C	073	63-003 (contact)	63-003 (contact)	Cu
98.50	49.25	Neoprene	N/A	+100°C	071	63-007 (contact)	63-007 (contact)	Al
98.50	49.25	Neoprene	N/A	+100°C	073	53-002 (cover)	53-002 (cover)	Cu
98.50	49.25	Neoprene	N/A	+100°C	071	53-004 (cover)	53-004 (cover)	Al
98.50	49.25	Neoprene	N/A	+100°C	073	59-007 (choke)	53-002 (cover)	Cu
98.50	49.25	Neoprene	N/A	+100°C	071	59-009 (choke)	53-004 (cover)	Al
98.50	49.25	Neoprene	N/A	+100°C	073	59-007 (choke)	59-007 (choke)	Cu
98.50	49.25	Neoprene	N/A	+100°C	071	59-009 (choke)	59-009 (choke)	Al
4/	4/	Neoprene	N/A	+100°C	073	63-003 (contact)	63-003 (contact)	Cu
106.50	53.25	Neoprene	N/A	+100°C	155	70-001 (cover)	70-001 (cover)	Cu
106.50	53.25	Neoprene	N/A	+100°C	157	70-002 (cover)	70-002 (cover)	Al
4/	4/	Neoprene	N/A	+100°C	155	70-001 (cover)	70-001 (cover)	Cu
114.50	57.25	Neoprene	N/A	+100°C	079	63-004 (contact)	63-004 (contact)	Cu
114.50	57.25	Neoprene	N/A	+100°C	077	63-008 (contact)	63-008 (contact)	Al
114.50	57.25	Neoprene	N/A	+100°C	079	53-001 (cover)	53-001 (cover)	Cu
114.50	57.25	Neoprene	N/A	+100°C	077	53-003 (cover)	53-003 (cover)	Al
114.50	57.25	Neoprene	N/A	+100°C	079	59-006 (choke)	53-001 (cover)	Cu
114.50	57.25	Neoprene	N/A	+100°C	077	59-008 (choke)	53-003 (cover)	Al
114.50	57.25	Neoprene	N/A	+100°C	079	59-006 (choke)	59-006 (choke)	Cu
114.50	57.25	Neoprene	N/A	+100°C	077	59-008 (choke)	59-008 (choke)	Al
4/	4/	Neoprene	N/A	+100°C	079	63-004 (contact)	63-004 (contact)	Cu

See footnotes at end of table I.

TABLE I. Flexible, nontwistable waveguide assemblies - Continued.

Group number	1/ PIN M287/4-	TE ₁₀ mode frequency range (GHz)	Minimum centerline bending radius (inch)		Insertion loss (db/ft)	Pressurization (lb _f /in ²) gage	2/ VSWR (max) at			
			E plane	H plane			12"	24"	36"	>36"
III	51-XXXX	12.4 - 18.0	1.25	2.00	0.25	60	1.13	1.15	1.19	1.24
	52-XXXX	12.4 - 18.0	1.25	2.00	0.25	60	1.13	1.15	1.19	1.24
	53-XXXX	12.4 - 18.0	1.25	2.00	0.25	60	1.13	1.15	1.19	1.24
	54-XXXX	12.4 - 18.0	1.25	2.00	0.25	60	1.13	1.15	1.19	1.24
	55-XXXX	12.4 - 18.0	1.25	2.00	0.25	60	1.13	1.15	1.19	1.24
	56-XXXX	12.4 - 18.0	1.25	2.00	0.25	60	1.13	1.15	1.19	1.24
	57-XXXX	12.4 - 18.0	1.25	2.00	0.25	60	1.13	1.15	1.19	1.24
	73-XXXX	12.4 - 18.0	1.25	2.00	0.25	60	1.13	1.15	1.19	1.24
III	58-XXXX	18.0 - 26.5	1.13	1.25	0.50	60	1.14	1.16	1.20	1.25
	59-XXXX	18.0 - 26.5	1.13	1.25	0.50	60	1.14	1.16	1.20	1.25
	60-XXXX	18.0 - 26.5	1.13	1.25	0.50	60	1.14	1.16	1.20	1.25
	61-XXXX	18.0 - 26.5	1.13	1.25	0.50	60	1.14	1.16	1.20	1.25
	62-XXXX	18.0 - 26.5	1.13	1.25	0.50	60	1.14	1.16	1.20	1.25
	63-XXXX	18.0 - 26.5	1.13	1.25	0.50	60	1.14	1.16	1.20	1.25
	74-XXXX	18.0 - 26.5	1.13	1.25	0.50	60	1.14	1.16	1.20	1.25

See footnotes at end of table I.

TABLE I. Flexible, nontwistable waveguide assemblies - Continued.

Flexure (degrees/ft) 1x10 ⁵ cycles		Jacket material	Retention force (lb _f)	Operating temp range -55°C to	Mates with standard rigid waveguide M85/1-	Flanges		
E plane	H plane					Flange 1 M3922/()	Flange 2 M3922/()	Material 3/
114.50	57.25	Neoprene	N/A	+100°C	089	53-005 (cover)	53-005 (cover)	Cu
114.50	57.25	Neoprene	N/A	+100°C	090	53-006 (cover)	53-006 (cover)	Al
114.50	57.25	Neoprene	N/A	+100°C	089	59-001 (choke)	53-005 (cover)	Cu
114.50	57.25	Neoprene	N/A	+100°C	090	59-002 (choke)	53-006 (cover)	Al
114.50	57.25	Neoprene	N/A	+100°C	089	59-001 (choke)	59-001 (choke)	Cu
114.50	57.25	Neoprene	N/A	+100°C	090	59-002 (choke)	59-002 (choke)	Al
114.50	57.25	Plastic	N/A	+65°C	090	53-006 (cover)	53-006 (cover)	Al
4/	4/	Neoprene	N/A	+100°C	089	53-005 (cover)	53-005 (cover)	Cu
137.50	68.75	Neoprene	N/A	+100°C	102	54-001 (cover)	54-001 (cover)	Cu
137.50	68.75	Neoprene	N/A	+100°C	103	54-002 (cover)	54-002 (cover)	Al
137.50	68.75	Neoprene	N/A	+100°C	102	59-003 (choke)	54-001 (cover)	Cu
137.50	68.75	Neoprene	N/A	+100°C	103	59-004 (choke)	54-002 (cover)	Al
137.50	68.75	Neoprene	N/A	+100°C	102	59-003 (choke)	59-003 (choke)	Cu
137.50	68.75	Neoprene	N/A	+100°C	103	59-004 (choke)	59-004 (choke)	Al
4/	4/	Neoprene	N/A	+100°C	102	54-001 (cover)	54-001 (cover)	Cu

- 1/ The complete part number shall be the number shown and a four-digit number indicating the nominal relaxed length in inches.
- 2/ The VSWR value for any length between the lengths specified shall be the next higher value (e.g. for a 15-inch length of M287/4-01, the VSWR would be 1.06:1).
- 3/ Cu = copper alloy, Al = aluminum alloy.
- 4/ The assemblies are constructed from beryllium copper and the flexure cycle is 10⁶ rather than 10⁵. All other characteristics are as listed.

TABLE II. Grouping for first article approval.

Group number	First article approval dash number	Dash numbers of assemblies receiving first article approval, with procuring activity approval
I	05	01 thru 04, and 06 thru 15
I	65	64, 66 and 67
II	25	16 thru 24 and 26 thru 50
II	69	68, 70, 71 and 72
III	59	51 thru 58, and 60 thru 63
III	74	73

Table III. Cross reference (type designation to part number).

Type designation	PIN M287/4- ()	Type designation	PIN M287/4- ()
FG650BEEB	01	FG042BCCB	60
FG430BEEB	04	FG284BCCA	13
FG340BEEB	06	FG187BCCA	21
FG284BEEB	08	FG137BCCA	29
FG187BEEB	16	FG112BCCA	38
FG137BEEB	24	FG090BCCA	48
FG112BEEB	33	FG062BCCA	54
FG090BEEB	43	FG042BCCA	61
FG650BEEA	02	FG284BDDB	10
FG430BEEA	05	FG187BDDB	18
FG340BEEA	07	FG137BDDB	26
FG284BEEA	09	FG112BDDB	35
FG187BEEA	17	FG090BDDB	45
FG137BEEA	25	FG062BDDB	51
FG112BEEA	34	FG042BDDB	58
FG090BEEA	44	FG284BDDB	11
FG284BCCB	12	FG187BDDB	19
FG187BCCB	20	FG137BDDB	27
FG137BCCB	28	FG112BDDB	36
FG112BCCB	37	FG090BDDB	46
FG090BCCB	47	FG062BDDB	52
FG062BCCB	53	FG042BDDB	59

TABLE IV. Substitution data. 1/

Dash number	Manufacturer's code (CAGE)	Manufacturer's PIN
01	2AAJ0	AF2B650
02	2AAJ0	AF6B650
04	2AAJ0	AF2B430
05	2AAJ0	AF6B430
06	2AAJ0	AF2B340
07	2AAJ0	AF6B340
08	2AAJ0	AW12C284
08	54647	MCP360400
09	2AAJ0	AW16C284
09	54647	MCP360401
10	2AAJ0	AS2C284
10	2AAJ0	AW2C284
10	54647	MCP360402
11	2AAJ0	AS6C284
11	2AAJ0	AW2C284
11	54647	MCP360403
12	2AAJ0	AS3C284
12	2AAJ0	AW3C284
12	54647	MCP360404
13	2AAJ0	AS7C284
13	2AAJ0	AW7C284
13	54647	MCP360405
14	2AAJ0	AS4C284
14	2AAJ0	AW4C284
14	54647	MCP360406
15	2AAJ0	AS8C284
15	2AAJ0	AW8C284
15	54647	MCP360407
16	2AAJ0	AF12B187
16	06351	TS-78268
17	2AAJ0	AF16B187
17	06351	TS-78269
18	2AAJ0	AF2B187
18	06351	TS-78271
19	2AAJ0	AF6B187
19	06351	TS-78272
20	2AAJ0	AF3B187
20	06351	TS-78230
21	2AAJ0	AF7B187
21	06351	TS-78270
22	2AAJ0	AF4B187
23	2AAJ0	AF8B187
24	2AAJ0	AF12B137
24	06351	TS-72377
24	54647	MCP360408
25	2AAJ0	AF16B137
25	06351	TS-72378
25	54647	MCP360409
26	2AAJ0	AS2C137
26	2AAJ0	AF2B137
26	06351	TS-72380
26	54647	MCP360410
27	2AAJ0	AS6C137
27	2AAJ0	AF6B137
27	06351	TS-72381
27	54647	MCP360411
28	2AAJ0	AS3C137
28	2AAJ0	AF3B137
28	06351	TS-72379
28	54647	MCP360412

See footnote at end of table IV.

TABLE IV. Substitution data. 1/ - Continued.

Dash number	Manufacturer's code (CAGE)	Manufacturer's PIN
29	2AAJ0	AS7C137
29	2AAJ0	AF7B137
29	06351	TS-72145
29	54647	MCP360413
30	2AAJ0	AS4C137
30	2AAJ0	AF4B137
30	54647	MCP360414
31	2AAJ0	AS6C137
31	2AAJ0	AF6B137
31	54647	MCP360415
32	54647	MCP360416
33	2AAJ0	AB12C112
33	06351	TS-68828
33	54647	MCP360417
34	2AAJ0	AE16C112
34	06351	TS-68781
34	54647	MCP360418
35	2AAJ0	AE2C112
35	06351	TS-68678
35	54647	MCP360419
36	2AAJ0	AE6C112
36	06351	TS-68829
36	54647	MCP360420
37	2AAJ0	AE3C112
37	06351	TS-68672
37	54647	MCP360421
38	2AAJ0	AE7C112
38	06351	TS-68634
38	54647	MCP360422
39	2AAJ0	AE4C112
39	54647	MCP360423
40	2AAJ0	AE6C112
40	54647	MCP360424
41	2AAJ0	AF2B102
42	2AAJ0	AF6B102
43	2AAJ0	AE12C090
43	06351	TS-641606
43	54647	MCP360425
44	2AAJ0	AE16C090
44	06351	TS-641607
44	54647	MCP360426
45	2AAJ0	AE2C090
45	06351	TS-641469
45	54647	MCP360427
46	2AAJ0	AE6C090
46	06351	TS-641377
46	54647	MCP360428
47	2AAJ0	AE3C090
47	06351	TS-641389
47	54647	MCP360429
48	2AAJ0	AE7C090
48	06351	TS-641372
48	54647	MCP360430
49	2AAJ0	AE4C090
49	54647	MCP360431
50	2AAJ0	AE8C090
50	54647	MCP360432
51	06351	TS-57487
51	54647	MCP360433

See footnote at end of table IV.

TABLE IV. Substitution data. 1/ - Continued.

Dash number	Manufacturer's code (CAGE)	Manufacturer's PIN
52	06351	TS-57603
52	54647	MCP360434
53	06351	TS-57604
53	54647	MCP360435
54	06351	TS-57483
54	54647	MCP360436
55	54647	MCP360437
56	54647	MCP360438
57	54647	MCP360439
58	54647	MCP360440
58	06351	TS-49097
58	54647	MCP360440
59	06351	TS-49083
59	54647	MCP360441
60	06351	TS-49084
60	54647	MCP360442
61	06351	TS-49082
61	54647	MCP360443
62	54647	MCP360444
63	54647	MCP360445
69	54647	MCP360446
70	54647	MCP360447
72	54647	MCP360448
73	54647	MCP360449
74	54647	MCP360450

1/ Assemblies covered by this specification sheet are substitutable for the manufacturer's PINs shown.

This information in no way implies that the manufacturer's part is substitutable for the military part.

CAGE code: 2AAJ0 - Airtron Division
 Litton Systems Incorporated
 200 East Hanover Avenue
 Morris Plains, NJ 07950-2442

06351 - Microwave Engineering Corporation
 1551 Osgood Street
 North Andover, MA 01845-1012
<http://www.microwaveeng.com>

54647 - Microtech, Inc.
 1425 Highland Ave.
 Cheshire, CT 06410-1216
 USA
<http://www.microtech-inc.com>

Referenced documents. This document only references MIL-DTL-287.

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 5985-2013-050)

Review activities:

Army - AR, AV, MI
Navy - AS, CG, MC, OS
Air Force - 19, 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/>.