

INCH-POUND

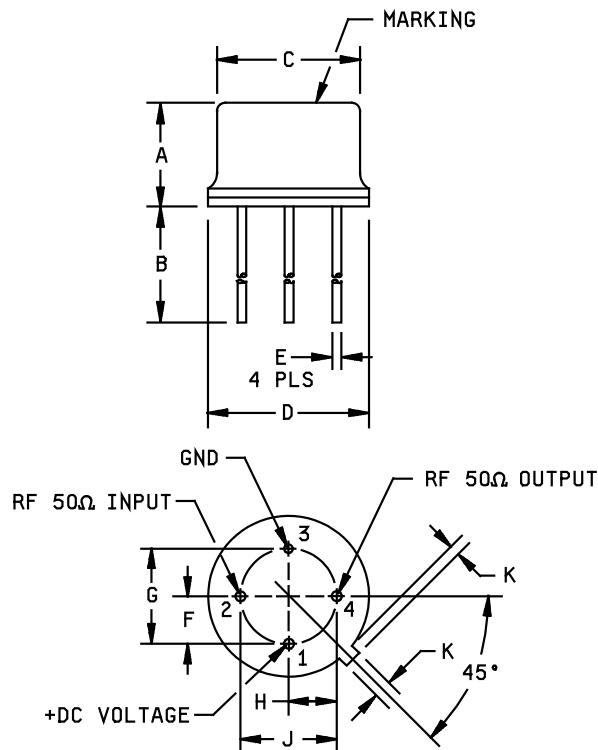
MIL-DTL-28875/8C
20 January 2015
SUPERSEDING
MIL-DTL-28875/8B
15 June 2010

DETAIL SPECIFICATION SHEET

AMPLIFIERS, RADIO-FREQUENCY AND MICROWAVE, SOLID-STATE, POWER, WIDEBAND, TO CONFIGURATION

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

The requirements for acquiring the amplifiers described herein
shall consist of this specification sheet and MIL-DTL-28875.



	Inches		Millimeters	
	Max	Min	Max	Min
B	N/A	.17	N/A	4.32
C	.455	.445	11.56	11.30
D	.510	.490	12.95	12.45
E	.019	.016	.48	.41
F	.160	.140	4.06	3.56
G	.310	.290	7.87	7.37
H	.160	.140	4.06	3.56
J	.310	.290	7.87	7.37
K	.05	N/A	1.3	N/A

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only (1.00 inch = 25.4 mm).

FIGURE 1. Dimensions and configuration.

AMSC N/A

FSC 5996



TABLE I. Electrical characteristics (25°C unless otherwise specified).

Dash No.	Freq. range	DC input power		Gain (dB)	Gain flatness (dB)	RF output power (dBm)	VSWR Max		Noise figure (dB)	Intercept point 3 rd order (dBm)	Harmonic output (dBc)	Gain versus temp. (dB)	RF input power (mW)	Iso-lation (dB)	Phase linearity (deg)
		Voltage	Curr. Max (mA)				IN	OUT							
S1 01 S2 N	10-400	+15 ±1%	35	12	±1.0	+10	2.0:1	2.0:1	7.5	+21	N/A	±1	32	N/A	N/A
S1 02 S2 N	2-500	+15 ±1%	65	12	±0.7	+14	2.0:1	2.0:1	7.0	+25	N/A	±1	N/A	N/A	N/A
S1 03 S2 N	5-500	+24 ±1%	50	9	±1.0	+13	2.0:1	2.0:1	7.0	+27	N/A	±1	N/A	N/A	N/A
S1 04 S2 N	5-500	+15 ±1%	80	23	±1.0	+12	2.0:1	2.0:1	7.0	+25	N/A	±1	N/A	N/A	N/A
S1 05 S2 N	5-500	+15 ±1%	48	15	±1.0	+13	2.0:1	2.0:1	6.0	+28	N/A	±1	N/A	N/A	N/A
S1 06 S2 N	5-500	+15 ±1%	50	16	±1.0	+17	2.5:1	2.5:1	6.0	+26	N/A	±1	N/A	N/A	N/A
S1 07 S2 N	10-500	+15 ±1%	121	14	±1.0	+22	2.0:1	2.0:1	9.0	+35	N/A	±1	N/A	N/A	N/A
S1 08 S2 N	10-500	+15 ±1%	105	9	±1.0	+22	2.0:1	2.0:1	9.0	+30	N/A	±1	N/A	N/A	N/A
S1 09 S2 N	10-1000	+15 ±1%	114	5.5	±1.3	+19	2.2:1	2.2:1	12.5	+34	N/A	±1	100	N/A	N/A

TABLE I. Electrical characteristics (25°C unless otherwise specified) - Continued.

Dash No.	Freq. range (MHz)	DC input power		Gain (dB) Min	Gain flatness (dB) Max	RF output power (dBm) Min	VSWR Max		Noise figure (dB) Max	Intercept point 3 rd order (dBm) Min	Harmonic output (dBc)	Gain versus temp. (dB)	RF input power (mW) Max	Isolation (dB) Min	Phase Linear. (deg) Max
		Voltage	Curr. Max (mA)				IN	OUT							
S1 10 S2 N	10-1500	+15 ±1%	45	9.5	±1.0	+13.5	2.0:1	2.0:1	7.5	+29	N/A	±1	20	N/A	N/A
S1 11 S2 N	10-1500	+15 ±1%	95	3	±1.2	+19	2.5:1	2.5:1	13.5	+32	N/A	±1	80	N/A	N/A

1/ Both RF input and output pins are at dc ground.

2/ RF input is at dc ground.

TABLE II. Dimension, physical and environmental characteristics.

Dash number	Dimension A in inches (mm) Max	Mass Max (Grams)	Temperature range		Burn-in temperature (case temp)	Seal	Salt
			Operating case temp	Nonoperating			
01 S1 S2 N	.26 (6.6)	1.9	-55/+100°C	-65/+125°C	+125°C	Hermetic	N/A
02 S1 S2 N	.18 (4.6)	1.9	-54/+85°C	-55/+125°C	+100°C	Hermetic	N/A
03 S1 S2 N	.18 (4.6)	1.9	-54/+85°C	-55/+125°C	+100°C	Hermetic	N/A
04 S1 S2 N	.21 (5.3)	1.9	-65/+110°C	-65/+125°C	+110°C	Hermetic	N/A
05 S1 S2 N	.21 (5.3)	1.9	-54/+85°C	-62/+125°C	+100°C	Hermetic	N/A
06 S1 S2 N	.21 (5.3)	1.9	-55/+85°C	-62/+100°C	+95°C	Hermetic	N/A
07 S1 S2 N	.18 (4.6)	1.9	-54/+71°C	-62/+100°C	+71°C	Hermetic	N/A
08 S1 S2 N	.18 (4.6)	1.9	-54/+85°C	-62/+125°C	+100°C	Hermetic	N/A
09 S1 S2 N	.21 (5.3)	1.9	-54/+85°C	-62/+125°C	+100°C	Hermetic	N/A
10 S1 S2 N	.21 (5.3)	1.9	-54/+85°C	-62/+125°C	+100°C	Hermetic	N/A
11 S1 S2 N	.21 (5.3)	1.9	-54/+85°C	-62/+125°C	+95°C	Hermetic	N/A

REQUIREMENTS:

Dimensions and configuration: See figure 1 and table II.

Electrical characteristics: See table I.

Physical and environmental characteristics: See table II.

Part number. M28875/8-(dash number from tables I and II).

Referenced documents. This specification sheet only references MIL-DTL-28875.

The margins of this specification sheet are marked with vertical lines to indicate where modifications from this revision 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.

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