



AmpliTech

"Amplify Your Potential"

Medium Power Amplifiers

DESCRIPTION



AmpliTech's Medium Power Amplifiers provide higher output power than most standard amplifiers while still maintaining the low noise characteristics associated with AmpliTech. AmpliTech's Medium Power Amplifiers can easily substitute the more expensive and oversized units like SSPA's and TWTA's. These units are made with the latest in GaAs, InP, InGaP, PHEMT, MHEMT, and MMIC designs.

These amplifiers are specifically designed for Military and Commercial purposes including satellite, space, prototyping, cellular, PCS, and other telephony applications.

AmpliTech is very competitive and will provide you with the best prices and customer service. Our goal is to offer the best quality amplifier available and we show this by - offering a standard 3 year warranty on all our amplifiers.

FEATURES

- | | |
|--|---|
| <ul style="list-style-type: none">• Low power consumption• Very stable, high gains• Flexible design for custom solutions• Operating temperature range of 0°C to +55°C• MIL-STD 883 and Space Level screening• Small, rugged, lightweight package• High dynamic range• Wide operating Bandwidths | <ul style="list-style-type: none">• High reliability• Multiple connector interfaces• Hermetically sealable• Internal regulator• Reverse Voltage protection• Up to 1 watt output power (for frequencies up to 2GHz)• Can be used as a driver amplifier |
|--|---|

OPTIONS

- | | |
|--|---|
| <ul style="list-style-type: none">• Higher output power, (up to +25 dBm)• Custom designs for all specifications | <ul style="list-style-type: none">• Input power protection• Higher dynamic range |
|--|---|

MEDIUM POWER AMPLIFIER SPECIFICATIONS

MODEL NUMBER	FREQ. RANGE (GHz)	GAIN (dB, Min.)	GAIN FLATNESS (dB, Max.)	NOISE FIGURE (dB, Max.)	RETURN LOSS - IN (Max.)	RETURN LOSS - OUT (Max.)	P1dB (dBm, Min.)	NOM. DC POWER (+15 V, mA)	AmpliTech OUTLINE DRAWING
APTMP1-00010100-1821-D4	.01-1	15	±1.50	1.80*	2.5:1	2.5:1	21	150	D4
APTMP4-00010100-4021-D4	.01-1	15	±1.50	4.00**	2.3:1	2.3:1	20	120	D4
APTMP3-00100050-1015-D6	.1-5	36	±1.00	1.00	2.5:1	2.0:1	15	150	D6
APTMP2-00100100-1823-D2	.1-1	13	±1.00	1.80	2.5:1	2.0:1	23	150	D2
APTMP1-00100100-3523-D2	.1-1	13	±2.00	3.50	2.5:1	2.5:1	23	200	D2
APTMP1-00100200-1121-D4	.1-2	15	±1.50	1.10	2.5:1	2.5:1	21	150	D4
APTMP2-00100200-2020-D4	.1-2	20	±1.50	2.00	2.0:1	2.0:1	20	150	D4
APTMP2-00100200-1121-D4	.1-2	25	±1.50	1.10	2.5:1	2.5:1	21	180	D4
APTMP3-00100200-2523-D4	.1-2	32	±1.50	2.50	2.0:1	2.5:1	23	300	D4
APTMP4-00100200-2527-D6	.1-2	32	±1.50	2.50	2.0:1	2.5:1	27	300	D6
APTMP3-00100300-1520-D4	.1-3	30	±1.50	1.5*	2.2:1	2.2:1	20	220	D4
APTMP4-00100300-2021-D4	.1-3	31	±1.50	2.00	2.0:1	2.0:1	21	250	D4
APTMP2-00100400-3520-D2	.1-4	16	±1.50	3.50	2.2:1	2.2:1	20	200	D2
APTMP4-00100400-2620-D4	.1-4	26	±1.50	2.60	2.0:1	2.0:1	20	250	D4
APTMP4-00100600-2620-D4	.1-6	26	±1.50	2.60	2.0:1	2.0:1	20	250	D4
APTMP2-00101000-5520-D2	.1-10	10	±1.75	5.50	2.2:1	2.2:1	20	200	D2
APTMP3-00101000-4020-D4	.1-10	18	±1.50	4.00	2.0:1	2.0:1	20	250	D4
APTMP2-00101800-5516-D4	.1-18	15	±2.75	5.50	2.5:1	2.5:1	16	200	D4
APTMP3-00101800-4520-D4	.1-18	23	±2.75	4.50	2.5:1	2.5:1	20	300	D4
APTMP5-00101800-3820-D6	.1-18	34	±2.75	3.80	2.5:1	2.5:1	20	250	D6
APTMP3-00501800-7020-D4	.5-18	16	±2.75	7.00	2.5:1	2.5:1	20	350	D4
APTMP4-00501800-6520-D6	.5-18	25	±2.75	6.50	2.5:1	2.5:1	20	350	D6
APTMP5-00501800-3023-D6	.5-18	34	±3.0	3.50	2.5:1	2.5:1	23	475	D6
APTMP6-00501800-3020-D6	.5-18	42	±2.5	3.00	2.5:1	2.5:1	20	450	D6
APTMP4-00501800-5021-D6	.5-18	27	±2.0	5.00	2.0:1	2.0:1	21	375	D6
APTMP3-00502000-5018-D4	.5-20	16	±2.75	5.00	2.5:1	2.5:1	18	350	D4
APTMP6-00102000-3518-D6	.1-20	34	±3.00	3.50	2.5:1	2.5:1	18	350	D6
APTMP2-00950122-0820-D2	.95-1.22	26	±0.5	0.80	1.8:1	1.8:1	20	120	D2
APTMP1-00951600-1015-D4	.95-1.60	10	±1.00	1.00	2.0:1	2.0:1	15	80	D4
APTMP5-01700240-1525-D6	1.7-2.4	38	±0.50	1.50	1.8:1	1.8:1	25	250	D6
APTMP1-01000200-1523-D4	1-2	13	±1.50	1.50	2.5:1	2.5:1	23	175	D4
APTMP2-01000200-2020-D2	1-2	20	±1.50	2.00	2.0:1	2.0:1	20	200	D2
APTMP4-01000400-1523-D4	1-4	33	±1.00	1.50	1.8:1	1.8:1	23	250	D4
APTMP3-01000800-4020-D4	1-8	18	±1.50	4.00	2.0:1	2.2:1	20	225	D4
APTMP3-01001800-3919-D4	1-18	24	±2.50	3.90	2.0:1	2.0:1	19	350	D4
APTMP2-01900210-2427-D4	1.9-2.1	23	±0.75	2.40	2.0:1	2.0:1	27	300	D4
APTMP4-02000300-1321-D4	2-3	45	±1.50	1.30	2.0:1	2.0:1	21	250	D4
APTMP4-02000400-3025-D4	2-4	28	±1.50	3.00	2.0:1	2.0:1	25	250	D4
APTMP4-02000400-2520-D4	2-4	40	±1.00	2.50	2.0:1	2.0:1	20	300	D4
APTMP3-02001800-5020-D4	2-18	15	±2.00	5.00	2.5:1	2.0:1	20	300	D4
APTMP3-02001800-3420-D4	2-18	17	±1.50	3.40	2.0:1	2.0:1	20	325	D4
APTMP4-02001800-4020-D4	2-18	24	±1.50	4.00	2.0:1	2.0:1	20	325	D4
APTMP6-02001800-4020-D6	2-18	40	±2.00	4.00	2.0:1	2.0:1	20	375	D6
APTMP3-02001800-5020-D4	2-18	20	±2.00	5.00	2.5:1	2.5:1	20	325	D4
APTMP3-03400420-1520-D4-GW	3.4-4.2	32-34	±0.75	1.50	2.0:1	2.5:1	20	225	D4
APTMP3-02002000-3620-D4	2-20	18	±2.00	3.60	2.5:1	2.5:1	20	350	D4
APTMP4-04000800-4022-D4	4-8	20	±1.00	4.00	2.0:1	2.0:1	22	250	D4
APTMP6-06001800-5020-D4	6-18	22	±2.00	5.00	2.0:1	2.0:1	20	300	D4
APTMP5-06400710-2015-D6	6.4-7.1	41	±1.00	2.00	1.5:1	1.5:1	15	200	D6
APTMP2-07900840-3020-D2	7.9-8.4	15	±0.50	3.00	2.0:1	2.0:1	20	150	D2
APTMP4-08000850-3020-D4	8.0-8.5	35	±1.00	3.00	2.0:1	2.0:1	20	150	D4
APTMP6-09001000-1117-D6	9-10	42	±1.00	1.10	1.75:1	1.75:1	17	200	D6
APTMP4-08001200-4020-D4	8-12	22	±1.25	4.00	2.0:1	2.0:1	20	250	D4
APTMP5-10701275-5023-D6	10.70-12.75	35	±0.75	5.00	2.0:1	2.0:1	23	400	D6
APTMP6-12001800-4020-D6	12-18	28	±2.00	4.00	2.0:1	2.0:1	20	375	D6
APTMP5-12002000-3522-D6	12-20	35	±2.00	3.50	2.5:1	2.5:1	22	375	D6
APTMP3-17002200-6020-D4	17-22	20	±2.50	6.00	2.0:1	2.5:1	20	150	D4
APTMP22-18002600-2117-D22	18-26	40	±1.50	2.10	2.0:1	2.0:1	17	250	D2+D2
APTMP6-18002600-2220-D6	18-26	40	±2.50	2.20	2.5:1	2.5:1	20	275	D6
APTMP3-17701970-1520-D6	17.7-19.7	38	±1.00	1.50	1.8:1	1.8:1	20	200	D6
APTMP4-17802130-1618-D4	17.8-21.3	20	±2.00	1.60	2.5:1	2.0:1	18	250	D4
APTMP2-21002400-6521-D2	21.0-24.0	13	±2.50	6.50	2.5:1	2.5:1	21	100	D2
APTMP3-21002400-6519-D4	21.0-24.0	20	±2.50	6.50	2.5:1	2.5:1	19	135	D4
APTMP3-21002400-2020-D6	21.0-24.0	38	±1.00	2.00	1.8:1	1.8:1	20	200	D6
APTMP2-22002650-2219-D2	22.0-26.5	25	±1.50	2.20	2.2:1	2.2:1	19	175	D2

* Noise figure degrades below 200 MHz.

** Noise figure degrades below 45 MHz.

Noise figures increase below 500 MHz in bands wider than .1-10 GHz.



1373 Lincoln Ave. • Holbrook, NY 11741
 Tel: (631)521-7831 - Fax: (631)521-7871
 E-mail: sales@amplitechinc.com
 Web: www.amplitechinc.com

DS-103