DESCRIPTION

This series of broadband low noise amplifiers has an integral temperature compensation network giving flat gain response over the full military temperature range. These amplifiers operate over a variety of octave and multi-octave frequency bands with a wide range of gain and output power options, performance is optimised for noise figure and dynamic range.

SPECIFICATIONS (guaranteed -55°C to +95°C)

Frequency Range (GHz)	Output Power at 1dB Gain Comp (dBm) Min.	Gain (dB) Min.	Gain Flatness (dB) Max.	Gain Variation with Temp (dB) Max	Noise Figure (dB) Max.	Input and Output VSWR Max.	DC Current at +15V (mA)	Package Styles	Part Number
2.0 - 8.0	+10	17	±2.00	±0.75	4.5	2.0	130	A1. A3	MLA 2240-101
		25	±2.00	±1.00	4.5	2.0	200	B1, B3	MLA 2240-102
		34	±2.25	±1.25	4.5	2.0	270	B1, B3	MLA 2240-103
	+15	17	±2.00	±0.75	5.0	2.0	150	A1. A3	MLA 2240-201
		25	±2.00	±1.00	5.0	2.0	220	B1, B3	MLA 2240-202
		34	±2.25	±1.25	5.0	2.0	300	B1, B3	MLA 2240-203
	+18	17	±2.00	±0.75	6.0	2.0	180	A1. A3	MLA 2240-301
		25	±2.00	±1.00	6.0	2.0	280	B1, B3	MLA 2240-302
		34	±2.25	±1.25	6.0	2.0	350	B1, B3	MLA 2240-303
6.0 - 12.0	+10	10	±1.00	±0.75	6.2	2.0	100	A1. A2	MLA 2250-101
		19	±1.25	±1.00	5.2	2.0	200	B1, B2	MLA 2250-102
		28	±1.75	±1.50	5.2	2.0	300	B1, B2	MLA 2250-103
		38	±2.00	±2.00	5.2	2.0	400	C1. C2	MLA 2250-104
		44	±2.00	±2.00	5.2	2.0	500	D1, D2	MLA 2250-105
	+15	10	±1.25	±0.75	6.5	2.0	150	A1. A2	MLA 2250-201
		19	±1.50	±1.00	5.5	2.0	250	B1, B2	MLA 2250-202
		28	±1.75	±1.50	5.5	2.0	350	B1, B2	MLA 2250-203
		38	±2.00	±2.00	5.5	2.0	450	C1. C2	MLA 2250-204
		44	±2.00	±2.00	5.5	2.0	500	D1, D2	MLA 2250-205
	+18	9	±1.25	±0.75	7.5	2.0	175	A1. A2	MLA 2250-301
		18	±1.50	±1.00	6.5	2.0	275	B1, B2	MLA 2250-302
		27	±1.75	±1.50	6.5	2.0	400	B1, B2	MLA 2250-303
		36	±2.00	±2.00	6.5	2.0	500	C1. C2	MLA 2250-304
		42	±2.00	±2.00	6.5	2.0	550	D1, D2	MLA 2250-305
12.0 - 18.0	+10	9	±1.00	±0.75	6.5	2.0	100	A1. A2	MLA 2260-101
		18	±1.25	±1.00	5.5	2.0	200	B1, B2	MLA 2260-102
		27	±1.75	±1.50	5.5	2.0	300	B1, B2	MLA 2260-103
		36	±2.00	±2.00	5.5	2.0	400	C1. C2	MLA 2260-104
		41	±2.00	±2.00	5.5	2.0	500	D1, D2	MLA 2260-105
	+15	9	±1.00	±0.75	8.0	2.0	150	A1, A2	MLA 2260-201
		18	±1.25	±1.00	7.0	2.0	250	B1, B2	MLA 2260-202
		27	±1.75	±1.50	7.0	2.0	350	B1, B2	MLA 2260-203
		36	±2.00	±2.00	7.0	2.0	450	C1, C2	MLA 2260-204
		41	±2.00	±2.00	7.0	2.0	500	D1, D2	MLA 2260-205
	+18	8	±1.00	±0.75	9.0	2.0	175	A1, A2	MLA 2260-301
		17	±1.25	±1.00	8.0	2.0	275	B1, B2	MLA 2260-302
		26	±1.75	±1.50	7.0	2.0	400	B1, B2	MLA 2260-303
		34	±2.00	±2.00	7.0	2.0	500	C1, C2	MLA 2260-304
		39	±2.00	±2.00	7.0	2.0	550	D1, D2	MLA 2260-305

SPECIFICATIONS (guaranteed -55°C to +95°C)

Frequency Range (GHz)	Output Power at 1dB Gain Comp (dBm) Min.	Gain (dB) Min.	Gain Flatness (dB) Max.	Gain Variation with Temp (dB) Max.	Noise Figure (dB) Max.	Input and Output VSWR Max.	DC Current at +15V (mA)	Package Styles	Part Number
6.0 - 18.0	+10	9	±1.00	±0.75	6.5	2.0	100	A1. A2	MLA 2270-101
		18	±1.50	±1.00	5.5	2.0	200	B1, B2	MLA 2270-102
		27	±1.75	±1.50	5.5	2.0	300	B1, B2	MLA 2270-103
		36	±2.00	±2.00	5.5.	2.0	400	C1. C2	MLA 2270-104
		41	±2.00	±2.00	5.5	2.0	500	D1, D2	MLA 2270-105
	+15	9	±1.25	±0.75	8.0	2.0	150	A1, A2	MLA 2270-201
		18	±1.50	±1.00	7.0	2.0	250	B1, B2	MLA 2270-202
		27	±1.75	±1.50	7.0	2.0	350	B1, B2	MLA 2270-203
		36	±2.00	±2.00	7.0	2.0	450	C1, C2	MLA 2270-204
		41	±2.00	±2.00	7.0	2.0	500	D1, D2	MLA 2270-205
	+18	8	±1.50	±0.75	9.0	2.0	175	A1, A2	MLA 2270-301
		17	±1.50	±1.00	8.0	2.0	275	B1, B2	MLA 2270-302
		26	±1.75	±1.50	7.0	2.0	400	B1, B2	MLA 2270-303
		34	±2.00	±2.00	7.0	2.0	500	C1, C2	MLA 2270-304
		39	±2.00	±2.00	7.0	2.0	550	D1, D2	MLA 2270-305

NOTES

1) Maximum input power without damage +20dBm (CW)
2) Third order intercept point is typically 10dB above P1dB
3) All amplifiers have reverse polarity and over voltage power supply protection
4) Alternative +8V and +12V power supplies are available on selected amplifiers, please contact the factory
5) All amplifiers are unconditionally stable for any input or output VSWR, any phase
6) Case operating temperature -55°C to +95°C
   Storage temperature -55°C to +125°C
7) Amplifiers are supplied in standard package styles (A1, B1, C1, D1) unless miniature option (A2, B2 etc) is specified.

DESCRIPTION

This series of broadband medium power amplifiers offers non-temperature compensated performance over a variety of octave and multi-octave frequency bands. These amplifiers have a wide range of gain and output power options and are optimised for output power and flatness.

SPECIFICATIONS (guaranteed @25°C)

Frequency Range (GHz)	Output Power at 1dB Gain Comp (dBm) Min.	Gain (dB) Min.	Gain Flatness (dB) Max.	Gain Variation with Temp (dB/°C)	Noise Figure (dB) Max.	Input and Output VSWR Max.	DC Current at +15V (mA)	Package Styles	Part Number
2.0 - 8.0	+21	17	±2.00	0.025	7.5	2.0	300	A1. A3	MLA 2140-401
		26	±2.00	0.035	6.0	2.0	400	B1, B3	MLA 2140-402
		35	±2.00	0.050	6.0	2.0	480	B1, B3	MLA 2140-403
	+26	15	±2.00	0.025	8.0	2.0	350	A1. A3	MLA 2140-501
		24	±2.00	0.035	7.0	2.0	450	B1, B3	MLA 2140-502
		33	±2.00	0.050	6.0	2.0	550	B1, B3	MLA 2140-503
6.0 - 12.0	+21	10	±1.00	0.025	9.0	2.0	200	A1. A2	MLA 2150-401
		21	±1.25	0.050	8.0	2.0	300	B1, B2	MLA 2150-402
		31	±1.50	0.075	8.0	2.0	450	B1, B2	MLA 2150-403
		42	±1.75	0.100	8.0	2.0	600	C1. C2	MLA 2150-404
	+25	9	±1.00	0.025	9.0	2.0	300	A1. A2	MLA 2150-501
		20	±1.25	0.050	8.0	2.0	450	B1, B2	MLA 2150-502
		29	±1.50	0.075	8.0	2.0	600	B1, B2	MLA 2150-503
		40	±1.75	0.100	8.0	2.0	800	C1. C2	MLA 2150-504
12.0 - 18.0	+21	9	±1.00	0.025	10.0	2.0	200	A1. A2	MLA 2160-401
		20	±1.25	0.050	9.0	2.0	300	B1, B2	MLA 2160-402
		30	±1.50	0.075	9.0	2.0	450	B1, B2	MLA 2160-403
		40	±1.75	0.100	9.0	2.0	600	C1. C2	MLA 2160-404
	+25	8	±1.00	0.025	10.0	2.0	300	A1, A2	MLA 2160-501
		19	±1.25	0.050	9.0	2.0	450	B1, B2	MLA 2160-502
		28	±1.50	0.075	9.0	2.0	600	B1, B2	MLA 2160-503
		38	±1.75	0.100	9.0	2.0	800	C1, C2	MLA 2160-504
6.0 - 18.0	+21	9	±1.25	0.025	10.0	2.0	200	A1, A2	MLA 2170-401
		20	±1.50	0.050	9.0	2.0	300	B1, B2	MLA 2170-402
		30	±1.75	0.075	9.0	2.0	450	B1, B2	MLA 2170-403
		40	±2.00	0.100	9.0	2.0	600	C1, C2	MLA 2170-404
	+25	8	±1.25	0.025	10.0	2.0	300	A1, A2	MLA 2170-501
		19	±1.50	0.050	9.0	2.0	450	B1, B2	MLA 2170-502
		28	±1.75	0.075	9.0	2.0	600	B1, B2	MLA 2170-503
		38	±2.00	0.100	9.0	2.0	800	C1, C2	MLA 2170-504

NOTES

1) Higher output powers of up to +30dBm are available in non-standard outlines, please contact the factory
2) Maximum input power without damage +20dBm (CW)
2) Third order intercept point is typically 10dB above P1dB
3) All amplifiers have reverse polarity and over voltage power supply protection
4) Alternative +8V and +12V power supplies are available on selected amplifiers, please contact the factory
5) All amplifiers are unconditionally stable for any input or output VSWR, any phase
6) Case operating temperature -55°C to +95°C
   Storage temperature -55°C to +125°C
7) Amplifiers are supplied in standard package styles (A1, B1, C1, D1) unless miniature option (A2, B2 etc) is specified.

DESCRIPTION

This series of broadband medium power amplifiers has an integral temperature compensation network giving flat gain response over the full military temperature range. These amplifiers operate over a variety of octave and multi-octave frequency bands with a wide range of gain and output power options, performance is optimised for output power and flatness.

SPECIFICATIONS (guaranteed -55°C to +95°C)

Frequency Range (GHz)	Output Power at 1dB Gain Comp (dBm) Min.	Gain (dB) Min.	Gain Flatness (dB) Max.	Gain Variation with Temp (dB) Max.	Noise Figure (dB) Max.	Input and Output VSWR Max.	DC Current at +15V (mA)	Package Styles	Part Number
2.0 - 8.0	+21	16	±2.00	±0.75	8.0	2.0	300	A1. A3	MLA 2240-401
		24	±2.00	±1.00	7.0	2.0	400	B1, B3	MLA 2240-402
		33	±2.00	±1.25	7.0	2.0	480	B1, B3	MLA 2240-403
	+26	14	±2.00	±0.75	9.0	2.0	350	A1. A3	MLA 2240-501
		22	±2.00	±1.00	8.0	2.0	450	B1, B3	MLA 2240-502
		31	±2.00	±1.25	7.0	2.0	550	B1, B3	MLA 2240-503
6.0 - 12.0	+21	9	±1.00	±0.75	10.0	2.0	200	A1. A2	MLA 2250-401
		20	±1.25	±1.00	9.0	2.0	300	B1, B2	MLA 2250-402
		29	±1.50	±1.50	9.0	2.0	450	C1, C2	MLA 2250-403
		40	±1.75	±2.00	9.0	2.0	600	D1. D2	MLA 2250-404
	+25	8	±1.00	±0.75	10.0	2.0	300	A1. A2	MLA 2250-501
		19	±1.25	±1.00	9.0	2.0	450	B1, B2	MLA 2250-502
		27	±1.50	±1.50	9.0	2.0	600	C1, C2	MLA 2250-503
		36	±1.75	±2.00	9.0	2.0	800	D1. D2	MLA 2250-504
12.0 - 18.0	+21	8	±1.00	±0.75	12.0	2.0	200	A1. A2	MLA 2260-401
		18	±1.25	±1.00	10.0	2.0	300	B1, B2	MLA 2260-402
		27	±1.50	±1.25	10.0	2.0	450	C1, C2	MLA 2260-403
		36	±1.75	±2.00	10.0	2.0	600	D1. D2	MLA 2260-404
	+25	7	±1.00	±0.75	12.0	2.0	300	A1, A2	MLA 2260-501
		17	±1.25	±1.00	10.0	2.0	450	B1, B2	MLA 2260-502
		25	±1.50	±1.25	10.0	2.0	600	C1, C2	MLA 2260-503
		34	±1.75	±2.00	10.0	2.0	800	D1, D2	MLA 2260-504
6.0 - 18.0	+21	8	±1.25	±0.75	12.0	2.0	200	A1, A2	MLA 2270-401
		18	±1.50	±1.00	10.0	2.0	300	B1, B2	MLA 2270-402
		27	±1.75	±1.50	10.0	2.0	450	C1, C2	MLA 2270-403
		36	±2.00	±2.00	10.0	2.0	600	D1, D2	MLA 2270-404
	+25	7	±1.25	±0.75	12.0	2.0	300	A1, A2	MLA 2270-501
		17	±1.50	±1.00	10.0	2.0	450	B1, B2	MLA 2270-502
		25	±1.75	±1.50	10.0	2.0	600	C1, C2	MLA 2270-503
		34	±2.00	±2.00	10.0	2.0	800	D1, D2	MLA 2270-504

NOTES

1) Higher output powers of up to +30dBm are available in non-standard outlines, please contact the factory
2) Maximum input power without damage +20dBm (CW)
2) Third order intercept point is typically 10dB above P1dB
3) All amplifiers have reverse polarity and over voltage power supply protection
4) Alternative +8V and +12V power supplies are available on selected amplifiers, please contact the factory
5) All amplifiers are unconditionally stable for any input or output VSWR, any phase
6) Case operating temperature -55°C to +95°C
   Storage temperature -55°C to +125°C
7) Amplifiers are supplied in standard package styles (A1, B1, C1, D1) unless miniature option (A2, B2 etc) is specified.