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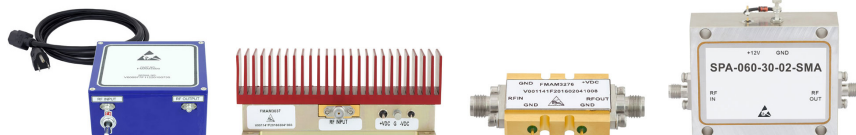
PRODUCT GUIDE
Amplifiers

Amplifiers for Every Application

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Amplifiers
















Broadband Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM3308 	Broadband, Low Noise	0.01 MHz - 3	16	1.5	4	12	0.015		26	15 / 47	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM3311 	Broadband, Low Noise	0.1 MHz - 10	33	6.5	5	13	0.02		26	12 / 110	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM3310 	Broadband, Low Noise	0.3 MHz - 6.5	39	4.5	4	17	0.05		29	12 / 120	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM3309 	Broadband, Low Noise	1 MHz - 3	21	1.5	4	22	0.16		35	15 / 110	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM4032 	Broadband, High Rel	10 MHz - 6	24	0.75	5	29.5	0.9		42	15 / 740	2.305 x 2.6 x 0.54	SMA	EAR99
FMAM3269 	Broadband, Low Noise	10 MHz - 6	34	1	3	14.5	0.03		25.5	12 / 130	1.7 x 0.95 x 0.375	SMA	EAR99
FMAM4029 	Broadband, High Rel	10 MHz - 20	13	0.75	3	23	0.2	25	30	15 / 225	0.86 x 0.7 x 0.29	SMA	EAR99
FMAM3272 	Broadband, Low Noise, High Rel	10 MHz - 20	15	0.5	3	22	0.16	24	30	12 / 195	0.86 x 0.7 x 0.29	SMA	EAR99
SLNA-200-15-30-SMA-B 	Broadband, Low Noise, High Rel	30 MHz - 20	15	2.5	3	20	0.1		29	15 / 180	1.08 x 0.36 x 0.18	SMA	EAR99
SLNA-180-14-30-SMA 	Broadband, Low Noise	100 MHz - 18	14	1.5	3	16	0.04	18	28	12 / 80	1.2 x 1 x 0.4	SMA	EAR99
SLNA-180-28-30-SMA 	Broadband, Low Noise	100 MHz - 18	28	2.5	3	16	0.04	18	28	12 / 160	1.5 x 1 x 0.4	SMA	EAR99
FMAM3312 	Broadband, Low Noise, High Rel	100 MHz - 26.5	15	2	5	15	0.03		23	15 / 200	0.9 x 1.05 x 0.38	SMA	EAR99
SDA-060-12-01-SMA 	Broadband	110 MHz - 6	11	1.25	6.5	27	0.5	30	38	12 / 300	1.55 x 1.37 x 0.55	SMA	EAR99
SDA-100-12-01-SMA 	Broadband	110 MHz - 10	10	1.5	6.5	27	0.5	30	38	12 / 300	1.55 x 1.37 x 0.55	SMA	EAR99
SPA-180-37-01-SMA-A 	Broadband	300 MHz - 18	37	2		30.5	1.12		42	15 / 750	1.9 x 1.5 x 0.5	SMA	EAR99














Broadband Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM4038 	Broadband, High Rel	500 MHz - 2	14	0.4	2.7	24	0.25		34	12 / 180	1.1 x 0.9 x 0.5	SMA	EAR99
SPA-020-27-003-SMA 	Broadband, High Rel	500 MHz - 2	30	0.6	2.7	24	0.25		34	12 / 240	0.9 x 1.1 x 0.5	SMA	EAR99
SPA-020-42-003-SMA 	Broadband, High Rel	500 MHz - 2	46	0.8	2.7	24	0.25		34	12 / 300	1.35 x 0.9 x 0.5	SMA	EAR99
FMAM4039 	Broadband, High Rel	500 MHz - 2.5	24	0.5	3.5	24	0.25			12 / 240	1.13 x 0.5 x 0.9	SMA	EAR99
SPA-180-27-002-SMA 	Broadband	500 MHz - 18	27	2.5	3	25	0.315		35	12 / 330	1.5 x 1 x 0.4	SMA	EAR99
SLNA-180-30-35-SMA 	Broadband, High Rel	500 MHz - 18	33	1.5	4	15	0.03			12 / 220	1.093 x 1.33 x 0.382	SMA	EAR99
SLNA-200-15-30-SMA-A 	Broadband, Low Noise, High Rel	500 MHz - 20	14	1.75	3	14	0.025		29	15 / 75	1.08 x 0.36 x 0.18	SMA	EAR99
SLNA-055-20-003-SMA 	Broadband, High Rel	800 MHz - 5.5	20	0.5		25	0.315	28	34	12 / 750	1.093 x 1.33 x 0.382	SMA	EAR99
SLNA-180-30-32-SMA 	Broadband, High Rel	1 - 18	30	1.5		19	0.1	20		12 / 240	1.093 x 1.33 x 0.382	SMA	EAR99
FMAM3276 	Broadband, Low Noise, High Rel	1.8 - 4.2	26		1.2	15.5	0.035	17.5	26	12 / 105	1.086 x 0.85 x 0.34	SMA	EAR99
FMAM4040 	Broadband, High Rel	2 - 6	13	0.4	5.4	23	0.2		33	12 / 180	1.083 x 1.093 x 0.382	SMA	EAR99
FMAM4041 	Broadband, High Rel	2 - 6	22	0.6	5.4	27	0.5		37	12 / 420	1.083 x 1.093 x 0.382	SMA	EAR99
SPA-060-30-02-SMA 	Broadband, High Rel	2 - 6	32	1	5	33	2		42	15 / 1,700	1.93 x 2.36 x 0.67	SMA	EAR99
SPA-060-30-01-SMA 	Broadband, High Rel	2 - 6	33	1	5	30	1		39	12 / 1,000	1.837 x 1.15 x 0.67	SMA	EAR99
FMAM4043 	Broadband, High Rel	2 - 6	44	1	4.5	35	3.16		45	12 / 4,200	3.87 x 3.64 x 0.67	SMA	EAR99




Broadband Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
SBBA-060-44-01-SMA 	Broadband, High Gain, High Rel	2-6	44	1	5	30	1		39	15 / 1,050	1.837 x 1.15 x 0.67	SMA	EAR99
FMAM3290 	Broadband, Low Noise, High Rel	2-8	14		2.5	13	0.02			12 / 120	1.083 x 1.093 x 0.382	SMA	EAR99
FMAM3291 	Broadband, Low Noise, High Rel	2-8	30		2.5	13	0.02			12 / 150	1.083 x 1.093 x 0.382	SMA	EAR99
FMAM4051 	Broadband	2-18	12	1.5		16	0.04			12 / 65	1.2 x 0.85 x 0.375	SMA	EAR99
FMAM3301 	Broadband, Low Noise	2-18	22	2.5	3.2	13	0.02			12 / 100	1.08 x 0.75 x 0.35	SMA	EAR99
SLNA-180-26-30-SMA 	Broadband, Low Noise	2-18	26	2	3	14	0.025		24	12 / 150	1.5 x 0.85 x 0.375	SMA	EAR99
SLNA-180-33-30-SMA 	Broadband, Low Noise	2-18	33	1	3				25	12 / 180	1.5 x 1 x 0.4	SMA	EAR99
SPA-180-37-01-SMA-B 	Broadband	2-18	37	1.5		30.5	1.12		42	15 / 800	1.9 x 1.5 x 0.5	SMA	EAR99
FMAM3271 	Broadband, Low Noise, High Rel	2-20	13	0.5	2	16	0.04	21	26	12 /	0.75 x 0.7 x 0.29	SMA	EAR99
FMAM3270 	Broadband, Low Noise, High Rel	2-20	15		2.5	13	0.02	15.5	23	12 / 78	0.64 x 0.59 x 0.29	SMA	EAR99
FMAM4027 	Broadband, High Rel	2-20	15	0.75		26	0.4		30	12 / 310	1.5 x 0.7 x 0.29	SMA	EAR99
FMAM4030 	Broadband, High Rel	2-20	31	0.75	3	26	0.4		30	15 / 400	0.86 x 0.7 x 0.29	SMA	EAR99
SPA-210-12-004-K 	Broadband	2-24	12	0.75	4	26	0.4	28	35	12 / 260	1.2 x 1 x 0.4	2.92mm	EAR99
FMAM3038 	Broadband, High Rel	2-35	12	0.4	4	18	0.06	18.5	26	16 /	1.086 x 0.195 x 0.85	2.92mm	3A001. B.4.C
FMAM4046 	Broadband, High Rel	3.1-3.5	30	0.7	4.5	30	1			12 / 900	2.17 x 0.86 x 0.32	SMA	EAR99



Broadband Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM4044 	Broadband, High Rel	6-12	16	0.6	5	27	0.5		37	12 / 400	1.083 x 1.093 x 0.382	SMA	EAR99
FMAM3292 	Broadband, Low Noise, High Rel	6-12	17		2.5	7	5			12 / 100	1.083 x 1.093 x 0.382	SMA	EAR99
FMAM3293 	Broadband, Low Noise, High Rel	6-12	30		2.5					12 / 200	1.583 x 1.093 x 0.382	SMA	EAR99
SPA-180-30-006-SMA 	Broadband, High Rel	6-18	30	1	3.5	28	0.63			12 / 1,300	2.1 x 1.15 x 0.42	SMA	EAR99
SPA-180-30-01-SMA-B 	Broadband, High Rel	6-18	30	1.5		30	1			18 / 1,700	2.65 x 2.5 x 0.45	SMA	EAR99
FMAM3302 	Broadband, Low Noise	6-18	32	1.5	2.3	14	0.025			12 / 150	1.08 x 0.75 x 0.35	SMA	EAR99
SLNA-180-38-25-SMA 	Broadband, Low Noise	6-18	38	2	2.5	22	0.16		30	12 / 280	1.5 x 1 x 0.4	SMA	EAR99
SPA-180-38-005-SMA 	Broadband, High Rel	6-18	42	2	5.4	27	0.5		37	12 / 900	2.083 x 1.093 x 0.5	SMA	EAR99
FMAM3273 	Broadband, Low Noise, High Rel	7-17	22		2.5	14	0.025			12 / 93	0.64 x 0.59 x 0.29	SMA	EAR99
FMAM3296 	Broadband, Low Noise, High Rel	12-18	18		3.5	13	0.02			12 / 100	1.083 x 1.093 x 0.382	SMA	EAR99
SPA-265-30-001-SMA 	Broadband	12.4-26.5	35	2	3	24.5	0.3			12 / 500	1.2 x 1.2 x 0.6	SMA	EAR99
FMAM4028 	Broadband, High Rel	17-24	22			24	0.25			12 / 250	1.086 x 0.85 x 0.36	2.92mm	EAR99
FMAM3274 	Broadband, Low Noise, High Rel	17-27	19		2.75	13.5	0.02			12 / 96	0.64 x 0.59 x 0.29	2.92mm	EAR99
FMAM3303 	Broadband, Low Noise	18-26.5	32	2.5	2.3	11	0.01			12 / 250	0.53 x 0.7 x 0.3	SMA	EAR99
FMAM3260 	Broadband, Low Noise	18-26.5	40	2	2.5	13	0.02		22	12 / 150	1.5 x 1 x 0.4	2.92mm	EAR99




Broadband Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM3268 	Broadband, Low Noise, High Rel	18 - 40	18	2	5.5	10	0.01			15 / 250	1 x 1.75 x 0.41	2.4mm	3A001. B.4.C
SPA-400-30-001-K 	Broadband	18 - 40	30	2.5	6.5	20	0.1			12 / 350	1.2 x 1.2 x 0.6	2.92mm	EAR99
FMAM3304 	Broadband, Low Noise	18 - 40	32	2	4	12	0.015			12 / 200	0.64 x 0.7 x 0.3	2.92mm	EAR99
FMAM3305 	Broadband, Low Noise	18 - 40	44	4	4	11	0.01			12 / 250	1.27 x 1.48 x 0.35	2.92mm	EAR99
SLNA-400-22-35-K 	Broadband, Low Noise	26.5 - 40	22	1	3.5	13.5	0.02		22	12 / 125	1.5 x 1 x 0.4	2.92mm	EAR99
FMAM4022 	Broadband	26.5 - 40	30	2	6	20	0.1			12 / 350	1.2 x 1.2 x 0.6	2.92mm	EAR99
FMAM3306 	Broadband, Low Noise	26.5 - 40	35	2.5	2.4	10.5	0.01			12 / 150	0.53 x 0.7 x 0.3	2.92mm	EAR99
FMAM3307 	Broadband, Low Noise	26.5 - 40	52	3.5	3.3	12	0.015			12 / 375	0.75 x 0.7 x 0.3	2.92mm	EAR99
FMAM3275 	Broadband, Low Noise, High Rel	29 - 36	20		2.9	11	0.01			3 / 80	1.086 x 0.85 x 0.375	2.92mm	EAR99











USB Controlled Broadband Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	NF (dB)	P1dB (dBm)	Control	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
SBUA-180-12-010-SMA 	USB, USB	50 MHz - 18	12	4.5	10	USB	2.25 x 1 x 0.33	SMA	EAR99
SBUA-400-12-010-K 	USB, USB	50 MHz - 40	12	5	10	USB	2.25 x 1 x 0.33	2.92mm	EAR99
















Bench-Top Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	DC Power (Optional DC In) (Volts)	AC Power (Voltage/Cycle)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM3037 	Bench-Top, Broadband, High Rel	10 MHz - 15	12	0.3	4	28	16 / 360		4.23 x 1.7 x 1.68	SMA	EAR99
FMAM3500 	Bench-Top, High Gain, High Rel	1 - 20	60	3	5	10		115 / 60	4.92 x 4.92 x 2.1	SMA	EAR99
FMAM3595 	Bench-Top, High Gain, High Rel	1 - 40	40	2.5	5	22	12 /	120 / 60	4.92 x 4.92 x 2.1	2.92mm	EAR99
















Low Noise Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
SLNA-030-32-30-SMA 	Low Noise	0.009 MHz - 3	32	1.25	2.5	16	0.04	29	15 / 110	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM1046 	Low Noise	0.01 MHz - 500 MHz	45	0.5	2.5	11	0.013	23	16 / 75	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1055 	Low Noise	0.01 MHz - 1.4	42	1	3	19	0.079	32	16 / 120		SMA	EAR99
FMAM1059 	Low Noise	0.01 MHz - 2	28	2	3.2	13	0.02	23	18 / 45	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1047 	Low Noise	0.03 MHz - 600 MHz	50	1.2	2.2	14	0.025	24	18 / 85	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1045 	Low Noise	1 MHz - 500 MHz	33.5	1.5	2	13	0.02	24	30 / 40	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1043 	Low Noise	10 MHz - 250 MHz	17	0.5	1.4	22	0.159	39	5.25 / 160	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1044 	Low Noise	10 MHz - 550 MHz	29.7	0.3	1.7	19	0.079	34	15 / 105	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1063 	Low Noise	10 MHz - 600 MHz	40.5	0.8	0.9	19	0.079	34	15 / 140	1.79 x 1.1 x 0.45	SMA	EAR99
FMAM1048 	Low Noise	10 MHz - 800 MHz	42	0.7	2	17	0.05	30	15 / 100	1.25 x 1.25 x 0.563	SMA	EAR99
















Low Noise Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM1065 	Low Noise	10 MHz - 800 MHz	60	1.5	2.1	17	0.05	27	15 / 160	1.79 x 1.1 x 0.45	SMA	EAR99
SLNA-010-30-10-SMA 	Low Noise	10 MHz - 1	30	0.7	1	17	0.05		15 / 110	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM1049 	Low Noise	10 MHz - 1	32		2	12	0.016	23	15 / 40	1.25 x 1.25 x 0.563	SMA	EAR99
SLNA-010-40-08-SMA 	High Gain	10 MHz - 1	40	1	0.8	17	0.05	31.5	15 / 110	1.5 x 0.85 x 0.375	SMA	EAR99
SLNA-010-50-10-SMA 	High Gain	10 MHz - 1	50	1.25	1	18	0.063	28	15 / 140	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM1052 	Low Noise	10 MHz - 1	51	0.8	2.2	13	0.02	22	15 / 88	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1054 	Low Noise	10 MHz - 1.3	35	0.5	1.5	20	0.1	34	15 / 165	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1009 	Low Noise	10 MHz - 3	34	0.75	1.4	11	0.013	25	15 / 95	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM1051 	Low Noise	20 MHz - 1	30	0.5	1.3	18	0.063	32	18 / 140	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1064 	Low Noise	20 MHz - 1	30.5	0.8	1.3	19	0.079	34	15 / 140	1.79 x 1.1 x 0.45	SMA	EAR99
FMAM1057 	Low Noise	20 MHz - 1.5	20	1.2	1	17	0.05	35	18 / 70	1.25 x 1.25 x 0.563	SMA	EAR99
SLNA-030-25-16-SMA 	Low Noise	20 MHz - 3	25	0.75	1.6	13.5	0.022	25	15 / 75	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM1061 	Low Noise	20 MHz - 4	25	0.7	2	18	0.063	34	5.5 / 160	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1060 	Low Noise	40 MHz - 3	16	1.6	1.3	7	0.005	22	3.3 / 18	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1050 	Low Noise	50 MHz - 1	18	0.5	1	16	0.04	32	18 / 70	1.25 x 1.25 x 0.563	SMA	EAR99








Low Noise Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
SLNA-001-25-10-SMA 	Low Noise	50 MHz - 1	19			18	0.063	36	12 / 90	1.38 x 0.5 x 1.2	SMA	EAR99
FMAM1053 	Low Noise	50 MHz - 1.2	47	1	2.2	13	0.02	23	15 / 88	1.25 x 1.25 x 0.563	SMA	EAR99
FMAM1042 	Low Noise	50 MHz - 2	27	0.75	1.8	22	0.159	37	13.5 / 160	1.2 x 0.85 x 0.375	SMA	EAR99
FMAM1066 	Low Noise	100 MHz - 2	61.5	1	2.5	19	0.079	33	15 / 170	1.79 x 1.1 x 0.45	SMA	EAR99
SLNA-030-15-25-SMA 	Low Noise	500 MHz - 3	14.5	0.4	2	20	0.1	35	12 / 90	1.38 x 0.5 x 1.18	SMA	EAR99
SLNA-030-30-30-SMA 	Low Noise	500 MHz - 3	29	1	2.6	20	0.1	34	12 / 190	3.15 x 0.493 x 2.56	SMA	EAR99
FMAM1068 	Low Noise	500 MHz - 4	24	2.5	0.7	17	0.05	34	15 / 65	1 x 0.79 x 0.45	SMA	EAR99
FMAM1067 	Low Noise	700 MHz - 2.7	23	1	0.7	18	0.063	35	15 / 65		SMA	EAR99
FMAM1000 	Low Noise, High Rel	1 - 2	35	1	1.5	10	0.01		13 / 200	1.77 x 1 x 0.5	SMA	EAR99
FMAM1019 	High Gain	1 - 2	40	1	0.8	11	0.013	25	12 / 120	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM1070 	Low Noise	1 - 4	20	1.2	0.8	20	0.1	41	15 / 120	1 x 0.79 x 0.45	SMA	EAR99
FMAM1031 	Low Noise, High Rel	1 - 12	16		1.75	17	0.05		6 / 60	1.14 x 1.9 x 0.56	SMA	EAR99
FMAM1023 	Low Noise, High Rel	1.2 - 1.4	25	0.75	1.5	10	0.01		13.2 / 150	2.32 x 2.32 x 0.71	SMA	EAR99
FMAM1024 	Low Noise, High Rel	1.2 - 1.4	35	0.75	1.5	17	0.05		13.2 / 180	2.32 x 2.32 x 0.71	SMA	EAR99
SLNA-014-40-35-SMA 	High Gain, High Rel	1.2 - 1.4	40	0.75	1.5	15	0.032		13.2 / 200	1.78 x 1.17 x 0.382	SMA	EAR99







Low Noise Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM1028 	Low Noise	1.2 - 1.6	40	0.5	0.8	12	0.016		15 / 100	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM1034 	Low Phase Noise, High Rel	1.5 - 5	14		4.5	17	0.05	27	9 / 170	1.14 x 1.9 x 0.56	SMA	EAR99
SLNA-040-38-20-SMA 	Low Noise, High Rel	2 - 4	38	1	2	13	0.02		13 / 200	2.283 x 1.093 x 0.382	SMA	EAR99
FMAM1041 	Low Noise	2 - 4	40	1	0.7	14	0.025		15 / 100	1.5 x 0.85 x 0.375	SMA	EAR99
SLNA-060-40-09-SMA 	High Gain	2 - 6	40	1	0.9	14	0.025	25	15 / 110	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM1030 	Low Phase Noise, High Rel	2 - 18	12.5		6.5	13	0.02		5 / 80	0.64 x 0.7 x 0.29	SMA	EAR99
FMAM1035 	Low Phase Noise, High Rel	3 - 8	11		6	14	0.025	25	7 / 250	1.14 x 1.9 x 0.56	SMA	EAR99
SLNA-035-40-11-SMA 	High Gain, High Rel	3.1 - 3.5	40	0.3	1.1	15	0.032		17 / 150	2.537 x 1.15 x 0.67	SMA	EAR99
SLNA-080-38-20-SMA 	Low Noise, High Rel	4 - 8	38	1	2	13	0.02		13 / 250	2.283 x 1.093 x 0.382	SMA	EAR99
FMAM9002 	Low Noise, High Rel	5 - 9	22.5		1.75	14.8	0.03	25	12 / 105	1.086 x 0.85 x 0.36	SMA	EAR99
FMAM1032 	Low Phase Noise, High Rel	6 - 12	11	1	4.5	20	0.1	34	7 / 200	1.14 x 1.9 x 0.56	SMA	EAR99
FMAM1072 	Low Noise	6 - 12	25	0.7	2.1	11	0.013	25	5.5 / 65	1 x 0.79 x 0.45	SMA	EAR99
FMAM1071 	Low Noise	6 - 18	26	2.5	1.9	11	0.013	25	5.5 / 65		SMA	EAR99
FMAM1033 	Low Phase Noise, High Rel	7 - 11	9		6	22	0.159	33	7 / 300	1.14 x 1.9 x 0.56	SMA	EAR99
FMAM1027 	Low Noise, High Rel	8 - 12	18	1	2.2	13	0.02		13 / 150	1.083 x 1.093 x 0.382	SMA	EAR99
















Low Noise Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM1026 	Low Noise, High Rel	8 - 12	28	1	2.2	13	0.02		13 / 200	1.333 x 1.093 x 0.382	SMA	EAR99
SLNA-120-38-22-SMA 	Low Noise, High Rel	8 - 12	38	1	2.2				13 / 250	1.58 x 1.093 x 0.382	SMA	EAR99
FMAM1025 	Low Noise, High Rel	8 - 12	48	1	2.2				13 / 300	2.83 x 1.093 x 0.382	SMA	EAR99
SLNA-180-38-30-SMA 	Low Noise, High Rel	12 - 18	38	1	3	13	0.02		13 / 300	2.283 x 1.093 x 0.382	SMA	EAR99
FMAM3300 	Low Noise	26.5 - 40	43	2	2	12	0.016	20	15 / 110	1.5 x 1 x 0.4	2.92mm	EAR99
FMAM1076 	Waveguide Low Noise	26.5 - 40	46	2.5	3	21	0.126	25	15 / 420		WR28	EAR99
FMAM1077 	Waveguide Low Noise	27 - 40	35	3	3	10	0.01	20	15 / 110		WR28	EAR99




Input Protected Low Noise Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM63012 	Input Protected Low Noise	0.001 MHz - 1	40	1	1	15	0.032	27	15 / 80	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM63013 	Input Protected Low Noise	0.001 MHz - 1	50	1.25	1	15	0.032	30	15 / 110	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM63014 	Input Protected Low Noise	0.001 MHz - 1	60	1.5	1	16	0.04		15 / 130	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM63000 	Input Protected Low Noise	10 MHz - 1	30	0.7	1	17	0.05	32	15 / 120	1.2 x 0.85 x 0.375	SMA	EAR99
FMAM63001 	Input Protected Low Noise	10 MHz - 1	40	1	1	17	0.05	31.5	15 / 110	1.2 x 0.85 x 0.375	SMA	EAR99
FMAM63018 	Input Protected Low Noise	10 MHz - 6	30	1	3.5	14.5	0.028	37	15 / 100	1.7 x 0.95 x 0.375	SMA	EAR99










Input Protected Low Noise Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM63016 	Input Protected Low Noise	20 MHz - 3	25	0.75	1.7	13	0.02	23	15 / 75	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM63002 	Input Protected Low Noise	30 MHz - 1.5	25	0.5	1.6	22	0.159	39	15 / 150	1.2 x 0.85 x 0.375	SMA	EAR99
FMAM63003 	Input Protected Low Noise	30 MHz - 1.5	29	0.5	1.6	23	0.2	39	15 / 160	1.2 x 0.85 x 0.375	SMA	EAR99
FMAM63017 	Input Protected Low Noise	30 MHz - 3	30	0.5	1.7	15	0.032	28	13 / 80	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM63020 	Input Protected Low Noise	100 MHz - 18	33	1.5	3.5	21.5	0.141	30	15 / 280	1.5 x 1 x 0.4	SMA	EAR99
FMAM63015 	Input Protected Low Noise	100 MHz - 18	38	1.5	3	17.5	0.056	26	15 / 300	1.9 x 1 x 0.4	SMA	EAR99
FMAM63004 	Input Protected Low Noise	900 MHz - 1.2	30	1	1.2	10	0.01		12 / 100	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM63005 	Input Protected Low Noise	900 MHz - 1.2	40	1	1.2	10	0.01		12 / 100	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM63006 	Input Protected Low Noise	1 - 1.4	30	1	1.2	10	0.01		12 / 110	1.5 x 0.85 x 0.375	SMA	EAR99
FMAM1075 	GaN Input Protected Low Noise	1 - 7	42	3.5	1.5	22	0.159	31	28 / 200		SMA	EAR99
FMAM1074 	GaN Input Protected Low Noise	1 - 23	29	1.5	3.5	20	0.1	32	28 / 250		SMA	EAR99
FMAM63007 	Input Protected Low Noise	2 - 2.6	30	0.35	0.85	12	0.016		15 / 110	1.7 x 0.95 x 0.375	SMA	EAR99
FMAM63019 	Input Protected Low Noise	2 - 6	40	1	1.2	14	0.025		15 / 90	1.7 x 0.95 x 0.375	SMA	EAR99
FMAM63008 	Input Protected Low Noise	2.6 - 3.1	30	1	1.2	10	0.01		12 / 120	1.7 x 0.95 x 0.375	SMA	EAR99
FMAM63009 	Input Protected Low Noise	2.6 - 3.1	40	1	1.2	10	0.01		12 / 120	1.7 x 0.95 x 0.4	SMA	EAR99




Input Protected Low Noise Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM63010 	Input Protected Low Noise	3.1 - 3.5	28	0.5	0.8	8	0.006	20	15 / 45	1.2 x 1 x 0.4	SMA	EAR99
FMAM1073 	GaN Input Protected Low Noise	5 - 13	44	2.5	1.8	22	0.159	31	28 / 160		SMA	EAR99
FMAM63021 	Input Protected Low Noise	26.5 - 40	35	2	2.5	11	0.013	20	15 / 110	1.5 x 1 x 0.4	SMA	EAR99





Temperature Compensated Low Noise Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	DC Current (mA)	ECCN
FMAM5101F 	Low Noise	500 MHz - 4	39	1.75	3	21	350	
FMAM5101 	Standard	500 MHz - 4	47	1.75	4	21	350	EAR99
FMAM5104F 	Standard	2 - 8	39	1.5	3.8	22	350	EAR99
FMAM5104 	Standard	2 - 8	40	1.5	4.5	22	350	EAR99
FMAM5106 	Standard	2 - 18	39	2.5	5.5	22	550	
FMAM5106F 	Low Noise	2 - 18	39	2.5	5.5	22	550	
FMAM5105 	Standard	4 - 12	40	1.75	3.5	22	350	EAR99
FMAM5105F 	Standard	4 - 12	40	1.75	4	22	350	EAR99
FMAM5107F 	Standard	6 - 18	43	2	4.7	22	400	EAR99





Temperature Compensated Low Noise Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	DC Current (mA)	ECCN
FMAM5107 	Standard	6 - 18	47	2	4.5	22	400	EAR99
FMAM5108F 	Low Noise	26.5 - 40	42	3	6.8	18	400	
FMAM5108 	Low Noise	26.5 - 40	45	3	7	18	400	













Limiting Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	Input Power	Psat (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM6015 	High Rel, Limiting	2 - 4	40		3	-20 to 10	19	15 / 200	1.358 x 0.66 x 0.38	SMA	EAR99
SLA-060-80-40-SMA 	High Rel, Limiting	2 - 6	80	3	4	-61 to 10	15	13 / 550	1.602 x 0.66 x 0.38	SMA	EAR99
SLA-080-40-50-SMA 	High Rel, Limiting	2 - 8	40	2	5	-20 to 15	19	13 / 300	1.6 x 1.15 x 0.42	SMA	EAR99
SLA-180-40-40-SMA 	High Rel, Limiting	6 - 18	40	2	4	-20 to 15	19	13 / 300	1.85 x 1.15 x 0.42	SMA	EAR99


Gain Block Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
SGB-030-14-090-SMA 	Gain Block	10 MHz - 3	15	2	3	11	0.01	12	18 / 40	1.38 x 0.5 x 1.18	SMA	EAR99
FMAM13 	Gain Block	10 MHz - 3	20	14	2.7	13	0.02		15 / 50	2.18 x 1.18 x 0.49	SMA	EAR99
FMAM8001 	Gain Block	10 MHz - 6	15	0.35	4.5	12	0.015	26	12 / 50	1.2 x 0.85 x 0.375	SMA	EAR99
FMAM17 	Gain Block	50 MHz - 1	22	0.75	3.5	12	0.015		12 / 150		SMA	EAR99



Gain Block Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM18 	Gain Block	50 MHz - 2	22	1	3.5	12	0.015		12 / 150	2.36 x 2.36 x 0.75	SMA	EAR99
SPA-040-26-002-SMA 	Gain Block	50 MHz - 4	26	1	5	22	0.16	35	12 / 120	2.08 x 1.08 x 0.5	SMA	EAR99
FMAM16 	Gain Block	100 MHz - 3	18	18	6	16	0.04		15 / 120	2.18 x 1.18 x 0.49	SMA	EAR99
FMAM25 	Gain Block	200 MHz - 2.5	22	1.25	6	15	0.03		15 / 120	2.18 x 1.18 x 0.49	SMA	EAR99
FMAM8004 	Gain Block, High Rel	500 MHz - 2	17	0.4	1.8			25	12 / 70	1.1 x 0.9 x 0.5	SMA	EAR99
FMAM8005 	Gain Block, High Rel	500 MHz - 2	50	1.8				25	12 / 180	1.083 x 1.093 x 0.382	SMA	EAR99
FMAM19 	Gain Block	1 - 4	26	0.5	2.5	15	0.03		12 / 120	2.36 x 2.36 x 0.75	SMA	EAR99
FMAM20 	Gain Block	2 - 4	25	0.5	2.5	15	0.03		12 / 120	2.36 x 2.36 x 0.75	SMA	EAR99
FMAM21 	Gain Block	2 - 6	26	0.5	3	15	0.03		12 / 120	2.36 x 2.36 x 0.75	SMA	EAR99
FMAM8006 	Gain Block, High Rel	6 - 12	12	0.4	2.3	10	0.01	20	12 / 80	1.083 x 1.093 x 0.382	SMA	EAR99
FMAM8007 	Gain Block, High Rel	6 - 18	17	0.6	4.5	20	0.1		12 / 160	1.083 x 1.093 x 0.382	SMA	EAR99
FMAM23 	Gain Block	6 - 18	22	1	4.5	13	0.02		12 / 150	1.45 x 0.39 x 0.78	SMA	EAR99












DC Coupled Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM86002 	Gain Block	DC - 17 MHz	30			14	0.025	25	/ 45	1.25 x 1.25 x 0.56	SMA	EAR99
















DC Coupled Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM86001 	Gain Block	DC - 1.5	14			11	0.01	25	/ 45	1.25 x 1.25 x 0.56	SMA	EAR99
FMAM86000 	Gain Block	DC - 2	8		16	11	0.01	25	12 / 45	1.25 x 1.25 x 0.56	SMA	EAR99
















Power Amplifiers (<4W)

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM5030 	High Power, High Rel	1 MHz - 1	36	1.5		33	2	36	39	28 / 1,200	6 x 3 x 1.1	SMA	EAR99
FMAM5030F 	High Power w/ Fan, High Rel	1 MHz - 1	36	1.5		33	2	36	39	28 / 1,700	8.7 x 5.2 x 3.5	SMA	EAR99
FMAM5055 	High Power, High Rel	1.5 MHz - 30 MHz	47	2				47		28 / 5,000	5.9 x 3.5 x 0.98	SMA	EAR99
FMAM5109 	Power	1.5 MHz - 30 MHz	53					53		28 / 15,000	7.5 x 5.9 x 1.2	SMA	EAR99
FMAM5056 	High Power, High Rel	1.5 MHz - 100 MHz	47	2				47		28 / 5,000	5.9 x 3.5 x 0.98	SMA	EAR99
FMAM5065 	High Power, High Rel	20 MHz - 520 MHz	51	2				50		28 / 9,000	5.91 x 3.54 x 0.98	SMA	EAR99
FMAM4072 	Power	20 MHz - 1	40	0.5	6				47	24 / 630	0 x 0 x 0	SMA	
FMAM5054 	High Power, High Rel	20 MHz - 1	49	2				49		28 / 11,000	0 x 0 x 0	SMA	
SPA-030-27-01-SMA 	Power	20 MHz - 3	27	0.75		30	1		39	12 / 220	2.08 x 1.08 x 0.5	SMA	EAR99
FMAM5086 	High Power, High Rel	30 MHz - 2.7	35	1.5				39		30 / 1,400	3.25 x 2.42 x 0.54	SMA	
SPA-030-38-01-SMA 	Power	30 MHz - 3	38	1		30	1		39	12 / 270	2.08 x 1.08 x 0.5	SMA	EAR99
















Power Amplifiers (<4W) Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
SPA-010-26-005-SMA 	Power, High Rel	50 MHz - 1	26	0.75	5	28	0.63		36	12 / 450	2.32 x 2.32 x 0.71	SMA	EAR99
SPA-060-36-008-SMA 	Power	60 MHz - 6	36	1.5	5	29	0.8		39	15 / 530	1.5 x 1 x 0.4	SMA	EAR99
FMAM4052 	High Rel	100 MHz - 18	37	3	6	31	1.26			15 / 1,000	0 x 0 x 0	SMA	
FMAM4052F 	Power w/ Fan, High Rel	100 MHz - 18	37	3	6	31	1.26			15 / 2,160	0 x 0 x 0	SMA	
FMAM5084 	Power	200 MHz - 2.6	46	4		33	2	10	44	28 / 1,400	0 x 0 x 0	SMA	EAR99
FMAM5058 	High Power, High Rel	500 MHz - 1	50	2				50		28 / 10,000	5.91 x 3.54 x 0.98	SMA	EAR99
FMAM4053 	High Rel	500 MHz - 4	30	3	6	30	1			12 / 1,500	1.97 x 0.93 x 0.35	SMA	EAR99
FMAM4053F 	Power w/ Fan, High Rel	500 MHz - 4	30	3	6	30	1			12 / 2,660	5.51 x 5.1 x 2.36	SMA	EAR99
FMAM5061 	High Power, High Rel	800 MHz - 1	53	2				53		28 / 25,000	7.9 x 5.9 x 0.98	SMA	EAR99
FMAM5077 	Power	800 MHz - 2	55	2.5		31	1.26	46	44	28 / 3,000	0 x 0 x 0	SMA	EAR99
FMAM5078 	Power w/ Fan	800 MHz - 2	60	5		33	2	46	44	28 / 3,000	0 x 0 x 0	SMA	EAR99
FMAM5034F 	Power w/ Fan	800 MHz - 4.2	31	2		30.8	1.2	31.8	41	13 / 1,000	4 x 2.9 x 2.1	SMA	
FMAM5034 	Power	800 MHz - 4.2	31	2		30.8	1.2	31.8	41	13 / 800	3 x 2.2 x 0.6	SMA	EAR99
FMAM4026 	Power	820 MHz - 960 MHz	15	0.5	2	30	1		46	12 / 500	1.2 x 1 x 0.4	SMA	EAR99
SPA-020-27-02-SMA 	Power	1 - 2	35	0.75	1.5	33	2		42	12 / 600	2.75 x 1.45 x 0.5	SMA	EAR99






Power Amplifiers (<4W) Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
SPA-020-27-04-SMA 	High Power	1-2	35	0.75	1.5	36	4		45	12 / 800	2.4 x 1.75 x 0.5	SMA	EAR99
FMAM5085 	Power	1-2.5	14	3				20	42	28 / 2,200	0 x 0 x 0	SMA	EAR99
FMAM5083 	Power	1-2.5	45	4		33	2	7	35.5	28 / 650	0 x 0 x 0	SMA	EAR99
FMAM5074 	Power	2-2.6	54	2.5		31	1.26	30	43	28 / 2,400	0 x 0 x 0	SMA	EAR99
FMAM4011 	High Power	2-4.4	32	0.5	10	36	4	37	37		1.2 x 1.5 x 0.56	SMA	EAR99
FMAM4054 	High Rel	2-8	38	2.5	5.5	30	1			12 / 1,200	1.82 x 0.93 x 0.35	SMA	EAR99
FMAM4054F 	Power w/ Fan, High Rel	2-8	38	2.5	5.5	30	1			12 / 2,360	5.51 x 5.1 x 2.36	SMA	EAR99
FMAM4056 	High Rel	2-18	30	2.5		30	1		37	12 / 2,500	2.22 x 1.7 x 0.6	SMA	EAR99
FMAM4056F 	Power w/ Fan, High Rel	2-18	30	2.5		30	1		37	12 / 3,660	5.51 x 5.1 x 2.36	SMA	EAR99
FMAM4057 	Power, High Rel	2-18	30	4		33	2		40	12 / 5,000	2.22 x 2 x 0.6	SMA	EAR99
FMAM4057F 	Power w/ Fan, High Rel	2-18	30	4		33	2		40	12 / 6,160	5.51 x 5.1 x 2.36	SMA	EAR99
FMAM4058 	High Rel	2-20	30	5.5		31	1.26		38	12 / 4,500	2.22 x 1.7 x 0.6	SMA	EAR99
FMAM4058F 	Power w/ Fan, High Rel	2-20	30	5.5		31	1.26		38	12 / 5,660	5.51 x 5.1 x 2.36	SMA	EAR99
SPA-035-43-10-SMA 	High Power, High Rel	3.1-3.5	45	1.5	4			40		15 / 5,000	3.64 x 3.87 x 0.67	SMA	EAR99
FMAM5079 	Power w/ Fan	4.4-4.9	48	5		33	2	20	44	28 / 3,600	0 x 0 x 0	SMA	EAR99









Power Amplifiers (<4W) Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM5080 	Power w/ Fan	4.4 - 4.9	48	5		33	2	20	44	28 / 3,600	0 x 0 x 0	SMA	5A991.G
FMAM4060 	High Rel	6 - 12	47	2.5	6.5	30.5	1.12			12 / 1,500	1.97 x 0.93 x 0.35	SMA	EAR99
FMAM4060F 	Power w/ Fan, High Rel	6 - 12	47	2.5	6.5	30.5	1.12			12 / 2,660	5.51 x 5.1 x 2.36	SMA	EAR99
FMAM4061F 	Power w/ Fan, High Rel	6 - 18	30	2.5	7	27	0.5			12 / 1,380	2.52 x 5.1 x 2.36	SMA	EAR99
FMAM4061 	High Rel	6 - 18	30	2.5	7	27	0.5			12 / 800	1.53 x 0.93 x 0.35	SMA	EAR99
FMAM4062 	High Rel	6 - 18	38	3.5	10	30	1			12 / 1,800	1.75 x 0.93 x 0.35	SMA	EAR99
FMAM4062F 	Power w/ Fan, High Rel	6 - 18	38	3.5	10	30	1			12 / 2,960	5.51 x 5.1 x 2.36	SMA	EAR99
FMAM4015 	High Power	8 - 11	28	3		32	1.585	36			1.2 x 1.5 x 0.56	SMA	EAR99
SPA-120-41-01-SMA 	Power, High Rel	8 - 12	41	1	3.5	30	1	31		12 / 1,200	2.91 x 2.36 x 0.63	SMA	EAR99
FMAM4063F 	Power w/ Fan, High Rel	8 - 12.4	30	1.75	6	27	0.5			12 / 1,380	2.52 x 5.1 x 2.36	SMA	EAR99
FMAM4063 	High Rel	8 - 12.4	30	1.75	6	27	0.5			12 / 800	1.53 x 0.93 x 0.35	SMA	EAR99
SPA-110-30-01-SMA 	Power, High Rel	8.5 - 11	30	0.5	3	30	1		38	15 / 900	2.1 x 1.15 x 0.42	SMA	EAR99
SPA-110-30-04-SMA 	Power, High Rel	8.5 - 11	30	0.75	5	36	4		45	12 / 4,500	3.87 x 3.64 x 0.67	SMA	EAR99
FMAM4064 	High Rel	18 - 26.5	28	2.5	7	27	0.5			12 / 1,150	1.08 x 1.48 x 0.35	SMA	EAR99
SPA-265-33-01-K 	Power	18 - 26.5	33	1.25	5	31	1.26		38	12 / 1,800	1.9 x 1.5 x 0.5	2.92mm	EAR99

Power Amplifiers (<4W) Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM4065 	High Rel	18 - 40	35	4	9	23	0.2			12 / 1,000	1.05 x 1.48 x 0.35	2.92mm	EAR99
FMAM4065F 	Power w/ Fan, High Rel	18 - 40	35	4	9	23	0.2			12 / 1,580	2.52 x 5.1 x 2.36	2.92mm	EAR99
FMAM4050 	Power	26.5 - 40	35	3	4.5	20	0.1	22	28	12 / 270	1.5 x 1 x 0.4	2.92mm	EAR99
FMAM4067 	High Rel	26.5 - 40	35	4	10			27		12 / 3,000	2.22 x 1.7 x 0.6	2.92mm	EAR99
FMAM4069 	High Rel	30 - 40	20	2				20		12 / 350	0.83 x 1.48 x 0.35	2.92mm	EAR99

High Power Amplifiers (>4W)

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM5028 	High Power, High Rel	0.15 MHz - 230 MHz	43	1.5		41.8	15.135	44	48	28 / 5,000	6 x 3 x 1.1	SMA	EAR99
FMAM5028F 	High Power, High Rel	0.15 MHz - 230 MHz	43	1.5		41.8	15.135	44	48	28 / 5,500	8.7 x 5.2 x 3.5	SMA	EAR99
FMAM5029 	High Power, High Rel	0.5 MHz - 500 MHz	44	1.5		40	10	39	42	28 / 2,000	6 x 3 x 1.1	SMA	EAR99
FMAM5029F 	High Power w/ Fan, High Rel	0.5 MHz - 500 MHz	44	1.5		40	10	39	42	28 / 2,000	8.3 x 5.2 x 3.5	SMA	EAR99
FMAM5031 	High Power, High Rel	20 MHz - 1	46	1.5		40	10	44	48	28 / 5,200	6 x 3 x 1.1	SMA	EAR99
FMAM5031F 	High Power w/ Fan, High Rel	20 MHz - 1	46	1.5		40	10	44	48	28 / 5,800	6 x 3 x 1.1	SMA	EAR99
FMAM5041 	High Power	800 MHz - 960 MHz	37	1	3	38	6.31		50	12 / 1,800	2.08 x 1.45 x 0.5	SMA	EAR99
FMAM5035F 	High Power, High Rel	800 MHz - 2	41	1.5		40	10	40.8	50	13 / 5,500	8.7 x 5.2 x 3.5	SMA	EAR99




High Power Amplifiers (>4W) Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
SPA-025-40-12-SMA 	High Power, Class A, High Rel	800 MHz - 2.5	40	2		41	12.6		50	12 / 5,500	6 x 3.5 x 0.69	SMA	EAR99
FMAM5036F 	High Power w/ Fan, High Rel	1 - 2.5	40	1.5		39	8	40	46	13 / 5,500	8.7 x 5.2 x 3.5	SMA	EAR99
FMAM5036 	High Power, High Rel	1 - 2.5	44	1.5		41	12.6	40	46	13 / 5,000	6.8 x 2.7 x 1	SMA	EAR99
FMAM5082 	Power w/ Fan	1 - 2.5	47	3		38	6.31	18	42	28 / 1,900	0 x 0 x 0	SMA	EAR99
FMAM5081 	Power	1 - 2.5	50	3		38	6.31	18	42	28 / 1,900	0 x 0 x 0	SMA	EAR99
FMAM5037 	High Power, High Rel	1 - 3	44	1.5		37.8	6.025	39	48	13 / 3,000	6.8 x 2.7 x 1	SMA	EAR99
FMAM5037F 	High Power w/ Fan, High Rel	1 - 3	44	1.5		37.8	6.025	39	48	13 / 4,000	8.7 x 5.2 x 3.5	SMA	EAR99
SPA-014-40-10-SMA 	High Power, High Rel	1.2 - 1.4	40	0.3		40	10			12 / 4,000	3.64 x 3.87 x 0.67	SMA	EAR99
FMAM5073 	Power	1.7 - 2.4	54	3		42	15.85	35	44	28 / 3,600	0 x 0 x 0	SMA	EAR99
FMAM5038 	Power	2 - 4	39	1.5		37.8	6.025	39	48	13 / 3,000	6.8 x 2.7 x 1	SMA	EAR99
SPA-035-43-20-SMA 	High Power, High Rel	3.1 - 3.5	47	1.5	3.5	43	20			12 / 9,000	2.85 x 7.99 x 0.63	SMA	EAR99
FMAM5009 	High Power	5.5 - 9.5	24	2	8.5	37	5.01	38	47		1.2 x 1.5 x 0.56	SMA	EAR99
FMAM5044 	High Power, High Rel	8.5 - 10.5	36	1.5		38.5	7.1		47	12 / 4,000	2.36 x 2.91 x 0.63	SMA	EAR99
FMAM5043 	High Power, High Rel	8.5 - 11	30	0.75	5	38.5	7.1		46	12 / 7,500	3.87 x 3.64 x 0.67	SMA	EAR99






GaN High Power Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM5027 	High Power	100 MHz - 6	60	1.25	10			40		28 / 2,200	2.5 x 2.75 x 0.45	SMA	EAR99
FMAM5059 	High Power, High Rel	500 MHz - 2.5	48	2				47		28 / 7,000	5.5 x 3.3 x 0.98	SMA	EAR99
FMAM5060 	High Power, High Rel	500 MHz - 2.5	50	2		43	20	50		28 / 13,000	7.08 x 3.54 x 0.98	SMA	EAR99
FMAM5032 	High Power, High Rel	500 MHz - 3	48	2		44	25.12	47	52	36 / 8,333	0 x 0 x 0	SMA	EAR99
FMAM5033 	High Power, High Rel	700 MHz - 2.7	45	1.5				50		30 / 8,733	7.25 x 4.25 x 0.95	SMA	EAR99
FMAM5033F 	High Power w/ Fan, High Rel	700 MHz - 2.7	45	1.5				50		30 / 8,733	10.75 x 7 x 3.75	SMA	EAR99
SPA-060-43-10-SMA 	High Power, High Rel	700 MHz - 6	43	2				40		32 / 2,000	3.75 x 1.75 x 1.06	SMA	EAR99
FMAM5062 	High Power, High Rel	800 MHz - 4.2	47	2				47		28 / 13,000	7.08 x 4.72 x 0.98	SMA	EAR99
FMAM5063 	High Power, High Rel	1 - 2	53	1.5				53		28 / 20,000	7.87 x 5.9 x 0.98	SMA	EAR99
FMAM5064 	High Power, High Rel	1.2 - 1.6	48	2.5				47		28 / 8,000	5.51 x 3.35 x 0.81	SMA	EAR99
FMAM5066 	High Power, High Rel	2 - 6	43	2				43		28 / 3,000	6.23 x 3.94 x 0.98	SMA	EAR99
FMAM5067 	High Power, High Rel	2 - 6	46	2				46		28 / 6,000	6.2 x 3 x 0.98	SMA	EAR99
SPA-060-45-25-SMA 	High Power, High Rel	2 - 6	50	1.25	7			44		28 / 3,000	2.5 x 2.75 x 0.45	SMA	EAR99
FMAM5068 	High Power, High Rel	2 - 18	37	3.5				37		22 / 2,500	4.72 x 3.15 x 0.87	SMA	EAR99
FMAM5069 	High Power, High Rel	6 - 10	43	2				43		24 / 7,000	6.3 x 4.7 x 0.86	SMA	EAR99




GaN High Power Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM5070 	High Power, High Rel	6 - 18	40	2				40		28 / 3,000	5.9 x 3.54 x 0.98	SMA	EAR99
FMAM5071 	High Power, High Rel	8 - 12	43	2				43		28 / 5,000	6.3 x 4.7 x 0.98	SMA	EAR99
FMAM5072 	High Power, High Rel	8 - 12	46	2				46		28 / 9,000	6.3 x 4.7 x 0.86	SMA	EAR99











Bi-Directional Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Tx Gain (dB)	Gain Variation +/- (dB)	P1dB (Watts) Linear	Rx P1dB (dBm)	Rx NF (dB)	Rx Gain (dB)	DC Power Tx (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FM15B5003 	High Power	30 MHz - 2.7	36	2			2	30	12 / 1,400	3.25 x 2.42 x 0.54	SMA	EAR99
FM15B5007 		225 MHz - 512 MHz	36	0.5			2.5	15	28 / 1,600		SMA	EAR99
FM15B5004 		4.4 - 4.9	45	1			3.5	10	28 / 4,600		SMA	EAR99
FM15B5005 		4.4 - 5.1	10	1			3	10	28 / 1,750		SMA	EAR99
FM15B5006 		5.125 - 5.875	43	1.25			3	10	28 / 2,500		SMA	EAR99




Variable Gain Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	Atten. Range (dB)	Step Size (dB)	P1dB (dBm)	AC Power (VAC)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAT7000 	Variable Gain, High Rel	100 MHz - 18	50	2	6.5	0 - 60	1	14	120	19 x 10.79 x 1.73	SMA	EAR99
FMAM7001 	Variable Gain	500 MHz - 2	45	2	3.5			18			SMA	EAR99
FMAM7002 	Variable Gain	500 MHz - 4	43	2	4			18			SMA	EAR99

Variable Gain Amplifiers Continued
















FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	Atten. Range (dB)	Step Size (dB)	P1dB (dBm)	AC Power (WAC)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	ECCN
FMAM7009 	Variable Gain	1 - 18	48	3	3.5			17			SMA	EAR99
FMAM7010 	Variable Gain	1 - 26.5	43	4	5.5			11		1.39 x 1.4 x 0.4	SMA	EAR99
FMAM7011 	Variable Gain	1 - 40	45	5	5			10		1.39 x 1.4 x 0.4	2.92mm	EAR99
FMAM7003 	Variable Gain	2 - 6	42	2	2			16			SMA	EAR99
FMAM7004 	Variable Gain	2 - 8	43	3	2.5			16			SMA	EAR99
FMAM7005 	Variable Gain	4 - 12	47	3	3.5			17			SMA	EAR99
FMAM7006 	Variable Gain	6 - 18	45	3	3			16			SMA	EAR99
FMAM7007 	Variable Gain	18 - 26.5	45	3	5.5			15		1.4 x 1.39 x 0.4	SMA	EAR99
FMAM7012 	Variable Gain	18 - 40	48	5	5			11		1.4 x 1.39 x 0.4	2.92mm	EAR99
FMAM7008 	Variable Gain	26.5 - 40	46	4	5			11		1.4 x 1.39 x 0.4	2.92mm	EAR99

High Rel Amplifiers

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	MIL Specs	ECCN
FMAM4032 	Broadband, High Rel	10 MHz - 6	24	0.75	5	29.5	0.9		42	15 / 740	2.305 x 2.6 x 0.54	SMA	*4	EAR99
FMAM3037 	Broadband, High Rel	10 MHz - 15	12	0.3	4	28	0.63	29	36	16 / 360	4.23 x 1.7 x 1.68	SMA	*4	EAR99
FMAM4029 	Broadband, High Rel	10 MHz - 20	13	0.75	3	23	0.2	25	30	15 / 225	0.86 x 0.7 x 0.29	SMA	*4	EAR99
















Notes: *1= Designed to meet test conditions for MIL-STD-810; *2= Designed to meet test conditions for MIL-STD-202; *3= Designed to meet and environmentally screened to MIL-STD-202 test conditions; *4 = Designed to meet test conditions for MIL-STD-883

High Rel Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	MIL Specs	ECCN
FMAM3272 	Broadband, High Rel	10 MHz - 20	15	0.5	3	22	0.16	24	30	12 / 195	0.86 x 0.7 x 0.29	SMA	*4	EAR99
SLNA-200-15-30-SMA-B 	Broadband, High Rel	30 MHz - 20	15	2.5	3	20	0.1		29	15 / 180	1.08 x 0.36 x 0.18	SMA	*2	EAR99
FMAM3312 	Broadband, High Rel	100 MHz - 26.5	15	2	5	15	0.03		23	15 / 200	0.9 x 1.05 x 0.38	SMA	*3	EAR99
FMAM4038 	Broadband, High Rel	500 MHz - 2	14	0.4	2.7	24	0.25		34	12 / 180	1.1 x 0.9 x 0.5	SMA	*3	EAR99
SPA-020-27-003-SMA 	Broadband, High Rel	500 MHz - 2	30	0.6	2.7	24	0.25		34	12 / 240	0.9 x 1.1 x 0.5	SMA	*3	EAR99
SPA-020-42-003-SMA 	Broadband, High Rel	500 MHz - 2	46	0.8	2.7	24	0.25		34	12 / 300	1.35 x 0.9 x 0.5	SMA	*3	EAR99
FMAM4039 	Broadband, High Rel	500 MHz - 2.5	24	0.5	3.5	24	0.25			12 / 240	1.13 x 0.5 x 0.9	SMA	*3	EAR99
SLNA-180-30-35-SMA 	Broadband, High Rel	500 MHz - 18	33	1.5	4	15	0.03			12 / 220	1.093 x 1.33 x 0.382	SMA	*3	EAR99
SLNA-200-15-30-SMA-A 	Broadband, High Rel	500 MHz - 20	14	1.75	3	14	0.025		29	15 / 75	1.08 x 0.36 x 0.18	SMA	*2	EAR99
SLNA-055-20-003-SMA 	Broadband, High Rel	800 MHz - 5.5	20	0.5		25	0.315	28	34	12 / 750	1.093 x 1.33 x 0.382	SMA	*3	EAR99
SLNA-180-30-32-SMA 	Broadband, High Rel	1 - 18	30	1.5		19	0.1	20		12 / 240	1.093 x 1.33 x 0.382	SMA	*3	EAR99
FMAM3500 	Broadband, High Rel	1 - 20	60	3	5	10	0.01				4.92 x 4.92 x 2.1	SMA	*2	EAR99
FMAM3595 	Broadband, High Rel	1 - 40	40	2.5	5	22	0.16			12 /	4.92 x 4.92 x 2.1	2.92mm	*2	EAR99
FMAM3276 	Broadband, High Rel	1.8 - 4.2	26		1.2	15.5	0.035	17.5	26	12 / 105	1.086 x 0.85 x 0.34	SMA	*4	EAR99
FMAM4040 	Broadband, High Rel	2 - 6	13	0.4	5.4	23	0.2		33	12 / 180	1.083 x 1.093 x 0.382	SMA	*3	EAR99
















Notes: *1= Designed to meet test conditions for MIL-STD-810; *2= Designed to meet test conditions for MIL-STD-202; *3= Designed to meet and environmentally screened to MIL-STD-202 test conditions; *4 = Designed to meet test conditions for MIL-STD-883

High Rel Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	MIL Specs	ECCN
FMAM4041 	Broadband, High Rel	2-6	22	0.6	5.4	27	0.5		37	12 / 420	1.083 x 1.093 x 0.382	SMA	*3	EAR99
SPA-060-30-02-SMA 	Broadband, High Rel	2-6	32	1	5	33	2		42	15 / 1,700	1.93 x 2.36 x 0.67	SMA	*3	EAR99
SPA-060-30-01-SMA 	Broadband, High Rel	2-6	33	1	5	30	1		39	12 / 1,000	1.837 x 1.15 x 0.67	SMA	*3	EAR99
FMAM4043 	Broadband, High Rel	2-6	44	1	4.5	35	3.16		45	12 / 4,200	3.87 x 3.64 x 0.67	SMA	*3	EAR99
SBBA-060-44-01-SMA 	Broadband, High Rel	2-6	44	1	5	30	1		39	15 / 1,050	1.837 x 1.15 x 0.67	SMA	*3	EAR99
FMAM3290 	Broadband, High Rel	2-8	14		2.5	13	0.02			12 / 120	1.083 x 1.093 x 0.382	SMA	*3	EAR99
FMAM3291 	Broadband, High Rel	2-8	30		2.5	13	0.02			12 / 150	1.083 x 1.093 x 0.382	SMA	*3	EAR99
FMAM3271 	Broadband, High Rel	2-20	13	0.5	2	16	0.04	21	26	12 /	0.75 x 0.7 x 0.29	SMA	*4	EAR99
FMAM3270 	Broadband, High Rel	2-20	14.5		2.5	13	0.02	15.5	23	12 / 78	0.64 x 0.59 x 0.29	SMA	*4	EAR99
FMAM4027 	Broadband, High Rel	2-20	15	0.75		26	0.4		30	12 / 310	1.5 x 0.7 x 0.29	SMA	*4	EAR99
FMAM4030 	Broadband, High Rel	2-20	31	0.75	3	26	0.4		30	15 / 400	0.86 x 0.7 x 0.29	SMA	*4	EAR99
FMAM3038 	Broadband, High Rel	2-35	12	0.4	4	18	0.06	18.5	26	16 /	1.086 x 0.195 x 0.85	2.92mm	*4	3A001. B.4.C
FMAM4046 	Broadband, High Rel	3.1-3.5	30	0.7	4.5	30	1			12 / 900	2.17 x 0.86 x 0.32	SMA	*3	EAR99
FMAM4044 	Broadband, High Rel	6-12	16	0.6	5	27	0.5		37	12 / 400	1.083 x 1.093 x 0.382	SMA	*3	EAR99
FMAM3292 	Broadband, High Rel	6-12	17		2.5	7	5			12 / 100	1.083 x 1.093 x 0.382	SMA	*3	EAR99


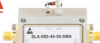









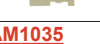

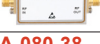
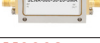
Notes: *1= Designed to meet test conditions for MIL-STD-810; *2= Designed to meet test conditions for MIL-STD-202; *3= Designed to meet and environmentally screened to MIL-STD-202 test conditions; *4 = Designed to meet test conditions for MIL-STD-883

High Rel Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	MIL Specs	ECCN
FMAM3293 	Broadband, High Rel	6-12	30		2.5					12 / 200	1.583 x 1.093 x 0.382	SMA	*3	EAR99
SPA-180-30-006-SMA 	Broadband, High Rel	6-18	30	1	3.5	28	0.63			12 / 1,300	2.1 x 1.15 x 0.42	SMA	*3	EAR99
SPA-180-30-01-SMA-B 	Broadband, High Rel	6-18	30	1.5		30	1			18 / 1,700	2.65 x 2.5 x 0.45	SMA	*3	EAR99
SPA-180-38-005-SMA 	Broadband, High Rel	6-18	42	2	5.4	27	0.5		37	12 / 900	2.083 x 1.093 x 0.5	SMA	*3	EAR99
FMAM3273 	Broadband, High Rel	7-17	22		2.5	14	0.025			12 / 93	0.64 x 0.59 x 0.29	SMA	*4	EAR99
FMAM3296 	Broadband, High Rel	12-18	18		3.5	13	0.02			12 / 100	1.083 x 1.093 x 0.382	SMA	*3	EAR99
FMAM4028 	Broadband, High Rel	17-24	22			24	0.25			12 / 250	1.086 x 0.85 x 0.36	2.92mm	*4	EAR99
FMAM3274 	Broadband, High Rel	17-27	19		2.75	13.5	0.02			12 / 96	0.64 x 0.59 x 0.29	2.92mm	*4	EAR99
FMAM3268 	Broadband, High Rel	18-40	18	2	5.5	10	0.01			15 / 250	1 x 1.75 x 0.41	2.4mm	*2	3A001. B.4.C
FMAM3275 	Broadband, High Rel	29-36	20		2.9	11	0.01			3 / 80	1.086 x 0.85 x 0.375	2.92mm	*2	EAR99
FMAM8004 	Gain Block, High Rel	500 MHz - 2	17	0.4	1.8				25	12 / 70	1.1 x 0.9 x 0.5	SMA	*3	EAR99
FMAM8005 	Gain Block, High Rel	500 MHz - 2	50	1.8					25	12 / 180	1.083 x 1.093 x 0.382	SMA	*3	EAR99
FMAM8006 	Gain Block, High Rel	6-12	12	0.4	2.3	10	0.01		20	12 / 80	1.083 x 1.093 x 0.382	SMA	*3	EAR99
FMAM8007 	Gain Block, High Rel	6-18	17	0.6	4.5	20	0.1			12 / 160	1.083 x 1.093 x 0.382	SMA	*3	EAR99
FMAM6015 	Limiting, High Rel	2-4	40		2.5	-20 to 10		19		15 / 200	1.358 x 0.66 x 0.38	SMA	*3	EAR99
















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High Rel Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	MIL Specs	ECCN
SLA-060-80-40-SMA 	Limiting, High Rel	2-6	80	3	4	-61 to 10		15		13 / 550	1.602 x 0.66 x 0.38	SMA	*3	EAR99
SLA-080-40-50-SMA 	Limiting, High Rel	2-8	40	2	5	-20 to 15		19		13 / 300	1.6 x 1.15 x 0.42	SMA	*3	EAR99
SLA-180-40-40-SMA 	Limiting, High Rel	6-18	40	2	4	-20 to 15		19		13 / 300	1.85 x 1.15 x 0.42	SMA	*3	EAR99
FMAM1000 	Low Noise, High Rel	1-2	35	1	1.5	10	0.01	10		13 / 200	1.77 x 1 x 0.5	SMA	*3	EAR99
FMAM1031 	Low Noise, High Rel	1-12	16		1.75	17	0.05			6 / 60	1.14 x 1.9 x 0.56	SMA	*3	EAR99
FMAM1023 	Low Noise, High Rel	1.2-1.4	25	0.75	1.5	10	0.01			13.2 / 150	2.32 x 2.32 x 0.71	SMA	*3	EAR99
FMAM1024 	Low Noise, High Rel	1.2-1.4	35	0.75	1.5	17	0.05			13.2 / 180	2.32 x 2.32 x 0.71	SMA	*3	EAR99
SLNA-014-40-35-SMA 	Low Noise, High Rel	1.2-1.4	40	0.75	1.5	15	0.032			13.2 / 200	1.78 x 1.17 x 0.382	SMA	*3	EAR99
FMAM1034 	Low Noise, High Rel	1.5-5	14		4.5	17	0.05	27	9 / 170		1.14 x 1.9 x 0.56	SMA		EAR99
SLNA-040-38-20-SMA 	Low Noise, High Rel	2-4	38	1	2	13	0.02	13		13 / 200	2.283 x 1.093 x 0.382	SMA	*3	EAR99
FMAM1030 	Low Noise, High Rel	2-18	12.5		6.5	13	0.02			5 / 80	0.64 x 0.7 x 0.29	SMA		EAR99
FMAM1035 	Low Noise, High Rel	3-8	11		6	14	0.025	25	7 / 250		1.14 x 1.9 x 0.56	SMA		EAR99
SLNA-035-40-11-SMA 	Low Noise, High Rel	3.1-3.5	40	0.3	1.1	15	0.032			17 / 150	2.537 x 1.15 x 0.67	SMA	*3	EAR99
SLNA-080-38-20-SMA 	Low Noise, High Rel	4-8	38	1	2	13	0.02	13		13 / 250	2.283 x 1.093 x 0.382	SMA	*3	EAR99
FMAM9002 	Low Noise, High Rel	5-9	22.5		1.75	14.8	0.03	25	12 / 105		1.086 x 0.85 x 0.36	SMA	*4	EAR99






Notes: *1= Designed to meet test conditions for MIL-STD-810; *2= Designed to meet test conditions for MIL-STD-202; *3= Designed to meet and environmentally screened to MIL-STD-202 test conditions; *4 = Designed to meet test conditions for MIL-STD-883

High Rel Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	MIL Specs	ECCN
FMAM1032 	Low Noise, High Rel	6 - 12	11	1	4.5	20	0.1	22	34	7 / 200	1.14 x 1.9 x 0.56	SMA	*4	EAR99
FMAM1033 	Low Noise, High Rel	7 - 11	9		6	22	0.159	25	33	7 / 300	1.14 x 1.9 x 0.56	SMA	*4	EAR99
FMAM1027 	Low Noise, High Rel	8 - 12	18	1	2.2	13	0.02	13		13 / 150	1.083 x 1.093 x 0.382	SMA	*3	EAR99
FMAM1026 	Low Noise, High Rel	8 - 12	28	1	2.2	13	0.02	13		13 / 200	1.333 x 1.093 x 0.382	SMA	*3	EAR99
SLNA-120-38-22-SMA 	Low Noise, High Rel	8 - 12	38	1	2.2			13		13 / 250	1.58 x 1.093 x 0.382	SMA	*3	EAR99
FMAM1025 	Low Noise, High Rel	8 - 12	48	1	2.2			13		13 / 300	2.83 x 1.093 x 0.382	SMA	*3	EAR99
SLNA-180-38-30-SMA 	Low Noise, High Rel	12 - 18	38	1	3	13	0.02	13		13 / 300	2.283 x 1.093 x 0.382	SMA	*3	EAR99
FMAM5028 	Power, High Rel	0.15 MHz - 230 MHz	43	1.5		41.8	15.135	44	48	28 / 5,000	6 x 3 x 1.1	SMA	*1	EAR99
FMAM5028F 	Power, High Rel	0.15 MHz - 230 MHz	43	1.5		41.8	15.135	44	48	28 / 5,500	8.7 x 5.2 x 3.5	SMA	*1	EAR99
FMAM5029 	Power, High Rel	0.5 MHz - 500 MHz	44	1.5		40	10	39	42	28 / 2,000	6 x 3 x 1.1	SMA	*1	EAR99
FMAM5029F 	Power, High Rel	0.5 MHz - 500 MHz	44	1.5		40	10	39	42	28 / 2,000	8.3 x 5.2 x 3.5	SMA	*1	EAR99
FMAM5030 	Power, High Rel	1 MHz - 1	36	1.5		33	2	36	39	28 / 1,200	6 x 3 x 1.1	SMA	*1	EAR99
FMAM5030F 	Power, High Rel	1 MHz - 1	36	1.5		33	2	36	39	28 / 1,700	8.7 x 5.2 x 3.5	SMA	*1	EAR99
FMAM5055 	Power, High Rel	1.5 MHz - 30 MHz	47	2				47		28 / 5,000	5.9 x 3.5 x 0.98	SMA		EAR99
FMAM5056 	Power, High Rel	1.5 MHz - 100 MHz	47	2				47		28 / 5,000	5.9 x 3.5 x 0.98	SMA		EAR99

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High Rel Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	MIL Specs	ECCN
FMAM5065 	Power, High Rel	20 MHz - 520 MHz	51	2				50		28 / 9,000	5.91 x 3.54 x 0.98	SMA		EAR99
FMAM5031 	Power, High Rel	20 MHz - 1	46	1.5		40	10	44	48	28 / 5,200	6 x 3 x 1.1	SMA	*1	EAR99
FMAM5031F 	Power, High Rel	20 MHz - 1	46	1.5		40	10	44	48	28 / 5,800	6 x 3 x 1.1	SMA	*1	EAR99
FMAM5054 	Power, High Rel	20 MHz - 1	49	2				49		28 / 11,000		SMA		
FMAM5086 	Power, High Rel	30 MHz - 2.7	35	1.5				39		30 / 1,400	3.25 x 2.42 x 0.54	SMA	*1	
SPA-010-26-005-SMA 	Power, High Rel	50 MHz - 1	26	0.75	5	28	0.63		36	12 / 450	2.32 x 2.32 x 0.71	SMA	*3	EAR99
FMAM4052 	Power, High Rel	100 MHz - 18	37	3	6	31	1.26			15 / 1,000		SMA	*2	
FMAM4052F 	Power, High Rel	100 MHz - 18	37	3	6	31	1.26			15 / 2,160		SMA		
FMAM5058 	Power, High Rel	500 MHz - 1	50	2				50		28 / 10,000	5.91 x 3.54 x 0.98	SMA		EAR99
FMAM5059 	Power, High Rel	500 MHz - 2.5	48	2				47		28 / 7,000	5.5 x 3.3 x 0.98	SMA		EAR99
FMAM5060 	Power, High Rel	500 MHz - 2.5	50	2		43	20	50		28 / 13,000	7.08 x 3.54 x 0.98	SMA		EAR99
FMAM5032 	Power, High Rel	500 MHz - 3	48	2		44	25.12	47	52	36 / 8,333		SMA	*1	EAR99
FMAM4053 	Power, High Rel	500 MHz - 4	30	3	6	30	1			12 / 1,500	1.97 x 0.93 x 0.35	SMA	*2	EAR99
FMAM4053F 	Power, High Rel	500 MHz - 4	30	3	6	30	1			12 / 2,660	5.51 x 5.1 x 2.36	SMA		EAR99
FMAM5033 	Power, High Rel	700 MHz - 2.7	45	1.5				50		30 / 8,733	7.25 x 4.25 x 0.95	SMA	*1	EAR99






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High Rel Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	MIL Specs	ECCN
FMAM5033F 	Power, High Rel	700 MHz - 2.7	45	1.5				50		30 / 8,733	10.75 x 7 x 3.75	SMA	*1	EAR99
SPA-060-43-10-SMA 	Power, High Rel	700 MHz - 6	43	2				40		32 / 2,000	3.75 x 1.75 x 1.06	SMA	*2	EAR99
FMAM5061 	Power, High Rel	800 MHz - 1	53	2				53		28 / 25,000	7.9 x 5.9 x 0.98	SMA		EAR99
FMAM5035F 	Power, High Rel	800 MHz - 2	41	1.5		40	10	40.8	50	13 / 5,500	8.7 x 5.2 x 3.5	SMA	*1	EAR99
SPA-025-40-12-SMA 	Power, High Rel	800 MHz - 2.5	40	2		41	12.6		50	12 / 5,500	6 x 3.5 x 0.69	SMA	*2	EAR99
FMAM5062 	Power, High Rel	800 MHz - 4.2	47	2				47		28 / 13,000	7.08 x 4.72 x 0.98	SMA		EAR99
FMAM5063 	Power, High Rel	1 - 2	53	1.5				53		28 / 20,000	7.87 x 5.9 x 0.98	SMA		EAR99
FMAM5036F 	Power, High Rel	1 - 2.5	40	1.5		39	8	40	46	13 / 5,500	8.7 x 5.2 x 3.5	SMA	*1	EAR99
FMAM5036 	Power, High Rel	1 - 2.5	44	1.5		41	12.6	40	46	13 / 5,000	6.8 x 2.7 x 1	SMA	*1	EAR99
FMAM5037 	Power, High Rel	1 - 3	44	1.5		37.8	6.025	39	48	13 / 3,000	6.8 x 2.7 x 1	SMA	*1	EAR99
FMAM5037F 	Power, High Rel	1 - 3	44	1.5		37.8	6.025	39	48	13 / 4,000	8.7 x 5.2 x 3.5	SMA	*1	EAR99
SPA-014-40-10-SMA 	Power, High Rel	1.2 - 1.4	40	0.3		40	10			12 / 4,000	3.64 x 3.87 x 0.67	SMA	*3	EAR99
FMAM5064 	Power, High Rel	1.2 - 1.6	48	2.5				47		28 / 8,000	5.51 x 3.35 x 0.81	SMA		EAR99
FMAM5066 	Power, High Rel	2 - 6	43	2				43		28 / 3,000	6.23 x 3.94 x 0.98	SMA		EAR99
FMAM5067 	Power, High Rel	2 - 6	46	2				46		28 / 6,000	6.2 x 3 x 0.98	SMA		EAR99
















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High Rel Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	MIL Specs	ECCN
SPA-060-45-25-SMA 	Power, High Rel	2-6	50	1.25	7			44		28 / 3,000	2.5 x 2.75 x 0.45	SMA	*1,*2	EAR99
FMAM4054 	Power, High Rel	2-8	38	2.5	5.5	30	1			12 / 1,200	1.82 x 0.93 x 0.35	SMA	*2	EAR99
FMAM4054F 	Power, High Rel	2-8	38	2.5	5.5	30	1			12 / 2,360	5.51 x 5.1 x 2.36	SMA		EAR99
FMAM4056 	Power, High Rel	2-18	30	2.5		30	1		37	12 / 2,500	2.22 x 1.7 x 0.6	SMA	*2	EAR99
FMAM4056F 	Power, High Rel	2-18	30	2.5		30	1		37	12 / 3,660	5.51 x 5.1 x 2.36	SMA		EAR99
FMAM4057 	Power, High Rel	2-18	30	4		33	2		40	12 / 5,000	2.22 x 2 x 0.6	SMA	*2	EAR99
FMAM4057F 	Power, High Rel	2-18	30	4		33	2		40	12 / 6,160	5.51 x 5.1 x 2.36	SMA		EAR99
FMAM5068 	Power, High Rel	2-18	37	3.5				37		22 / 2,500	4.72 x 3.15 x 0.87	SMA		EAR99
FMAM4058 	Power, High Rel	2-20	30	5.5		31	1.26		38	12 / 4,500	2.22 x 1.7 x 0.6	SMA	*2	EAR99
FMAM4058F 	Power, High Rel	2-20	30	5.5		31	1.26		38	12 / 5,660	5.51 x 5.1 x 2.36	SMA		EAR99
SPA-035-43-10-SMA 	Power, High Rel	3.1-3.5	45	1.5	4			40		15 / 5,000	3.64 x 3.87 x 0.67	SMA	*3	EAR99
SPA-035-43-20-SMA 	Power, High Rel	3.1-3.5	47	1.5	3.5	43	20			12 / 9,000	2.85 x 7.99 x 0.63	SMA	*3	EAR99
FMAM5069 	Power, High Rel	6-10	43	2				43		24 / 7,000	6.3 x 4.7 x 0.86	SMA		EAR99
FMAM4060 	Power, High Rel	6-12	47	2.5	6.5	30.5	1.12			12 / 1,500	1.97 x 0.93 x 0.35	SMA	*2	EAR99
FMAM4060F 	Power, High Rel	6-12	47	2.5	6.5	30.5	1.12			12 / 2,660	5.51 x 5.1 x 2.36	SMA		EAR99






Notes: *1= Designed to meet test conditions for MIL-STD-810; *2= Designed to meet test conditions for MIL-STD-202; *3= Designed to meet and environmentally screened to MIL-STD-202 test conditions; *4 = Designed to meet test conditions for MIL-STD-883

High Rel Amplifiers Continued

FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	MIL Specs	ECCN
FMAM4061F 	Power, High Rel	6-18	30	2.5	7	27	0.5			12 / 1,380	2.52 x 5.1 x 2.36	SMA		EAR99
FMAM4061 	Power, High Rel	6-18	30	2.5	7	27	0.5			12 / 800	1.53 x 0.93 x 0.35	SMA	*2	EAR99
FMAM4062 	Power, High Rel	6-18	38	3.5	10	30	1			12 / 1,800	1.75 x 0.93 x 0.35	SMA	*2	EAR99
FMAM4062F 	Power, High Rel	6-18	38	3.5	10	30	1			12 / 2,960	5.51 x 5.1 x 2.36	SMA		EAR99
FMAM5070 	Power, High Rel	6-18	40	2				40		28 / 3,000	5.9 x 3.54 x 0.98	SMA		EAR99
SPA-120-41-01-SMA 	Power, High Rel	8-12	41	1	3.5	30	1	31		12 / 1,200	2.91 x 2.36 x 0.63	SMA	*3	EAR99
FMAM5071 	Power, High Rel	8-12	43	2				43		28 / 5,000	6.3 x 4.7 x 0.98	SMA		EAR99
FMAM5072 	Power, High Rel	8-12	46	2				46		28 / 9,000	6.3 x 4.7 x 0.86	SMA		EAR99
FMAM4063F 	Power, High Rel	8-12.4	30	1.75	6	27	0.5			12 / 1,380	2.52 x 5.1 x 2.36	SMA		EAR99
FMAM4063 	Power, High Rel	8-12.4	30	1.75	6	27	0.5			12 / 800	1.53 x 0.93 x 0.35	SMA	*2	EAR99
FMAM5044 	Power, High Rel	8.5-10.5	36	1.5		38.5	7.1		47	12 / 4,000	2.36 x 2.91 x 0.63	SMA		EAR99
SPA-110-30-01-SMA 	Power, High Rel	8.5-11	30	0.5	3	30	1		38	15 / 900	2.1 x 1.15 x 0.42	SMA	*3	EAR99
SPA-110-30-04-SMA 	Power, High Rel	8.5-11	30	0.75	5	36	4		45	12 / 4,500	3.87 x 3.64 x 0.67	SMA	*3	EAR99
FMAM5043 	Power, High Rel	8.5-11	30	0.75	5	38.5	7.1		46	12 / 7,500	3.87 x 3.64 x 0.67	SMA	*3	EAR99
FMAM4064 	Power, High Rel	18-26.5	28	2.5	7	27	0.5			12 / 1,150	1.08 x 1.48 x 0.35	SMA	*2	EAR99



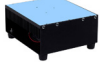



Notes: *1= Designed to meet test conditions for MIL-STD-810; *2= Designed to meet test conditions for MIL-STD-202; *3= Designed to meet and environmentally screened to MIL-STD-202 test conditions; *4 = Designed to meet test conditions for MIL-STD-883

High Rel Amplifiers Continued





FM P/N	Amplifier Type	Frequency Band (GHz)	Gain (dB)	Gain Variation +/- (dB)	NF (dB)	P1dB (dBm)	P1dB (Watts)	Psat (dBm)	IP3 (dBm)	DC Power (Volts/mA)	Mechanical Dimensions L(in) x W(in) x H(in)	Connector Type	MIL Specs	ECCN
FMAM4065 	Power, High Rel	18 - 40	35	4	9	23	0.2			12 / 1,000	1.05 x 1.48 x 0.35	2.92mm	*2	EAR99
FMAM4065F 	Power, High Rel	18 - 40	35	4	9	23	0.2			12 / 1,580	2.52 x 5.1 x 2.36	2.92mm		EAR99
FMAM4067 	Power, High Rel	26.5 - 40	35	4	10			27		12 / 3,000	2.22 x 1.7 x 0.6	2.92mm	*2	EAR99
FMAM4069 	Power, High Rel	30 - 40	20	2				20		12 / 350	0.83 x 1.48 x 0.35	2.92mm	*2	EAR99
FMAT7000 	Variable Gain, High Rel	100 MHz - 18	50	2		14	0.025				19 x 10.79 x 1.73	SMA	*2	EAR99

Notes: *1= Designed to meet test conditions for MIL-STD-810; *2= Designed to meet test conditions for MIL-STD-202;
 *3= Designed to meet and environmentally screened to MIL-STD-202 test conditions; *4 = Designed to meet test conditions for MIL-STD-883

Amplifier Accessories



FM P/N	Description
FMAMC5022 	Heat Sink for Rf Power Amplifier PE15A5022
FMAMC5013F 	Heat Sink with 12V Fan for Most RF Power Amplifier PE15A5000 Series
FMAMC5022F 	Heat Sink with 24V Fan for RF Power Amplifier PE15A5022
SPA-00-00-KIT 	Heat Sink with Fan for RF Power Amplifier PE15A5024, PE15A5025 and PE15A5027
FMAMC5014 	Heatsink for amplifier models PE15A4011-4015 and PE15A5004-5009
FMAMG5060F 	Heatsink for amplifier models PE15A5055-5059, PE15A5064-5065, PE15A5068 and PE15A5070
FMAMG5068F 	Heatsink for amplifier models PE15A5060-5063, PE15A5066-5067, PE15A5069, PE15A5071-5072
FMAMJ5011 	Power and Control Cable for RF Amplifier PE15A5011, PE15A5014, PE15A5016, PE15A5017, PE15A5018, PE15A5019, PE15A5020 and PE15A5022

Amplifier Accessories








FM P/N	Description
FMAMJ5015 	Power and Control Cable for RF Amplifier PE15A5015, PE15A5023
FMAMK5000 	Power and Control Cable for RF Amplifier PE15B5000 and PE15B5001
FMAMK5002 	Power and Control Cable for RF Amplifier PE15B5002
FMAMJ000 	Power and Control Cable for RF Bi-Directional Amplifier PE15B5003

Waveguides

Waveguide Power Amplifiers

FM P/N	Waveguide Type	RF Frequency Range (GHz)	Minimum Gain (dB)	Saturated Output Power (dBm)	Flange Type	ECCN
FMAM4023 	WR-12	70.5 - 76.5	25	20	Round Cover UG-387/U	EAR99
FMAM4024 	WR-12	80.5 - 86.5	20	19	Round Cover UG-387/U	EAR99

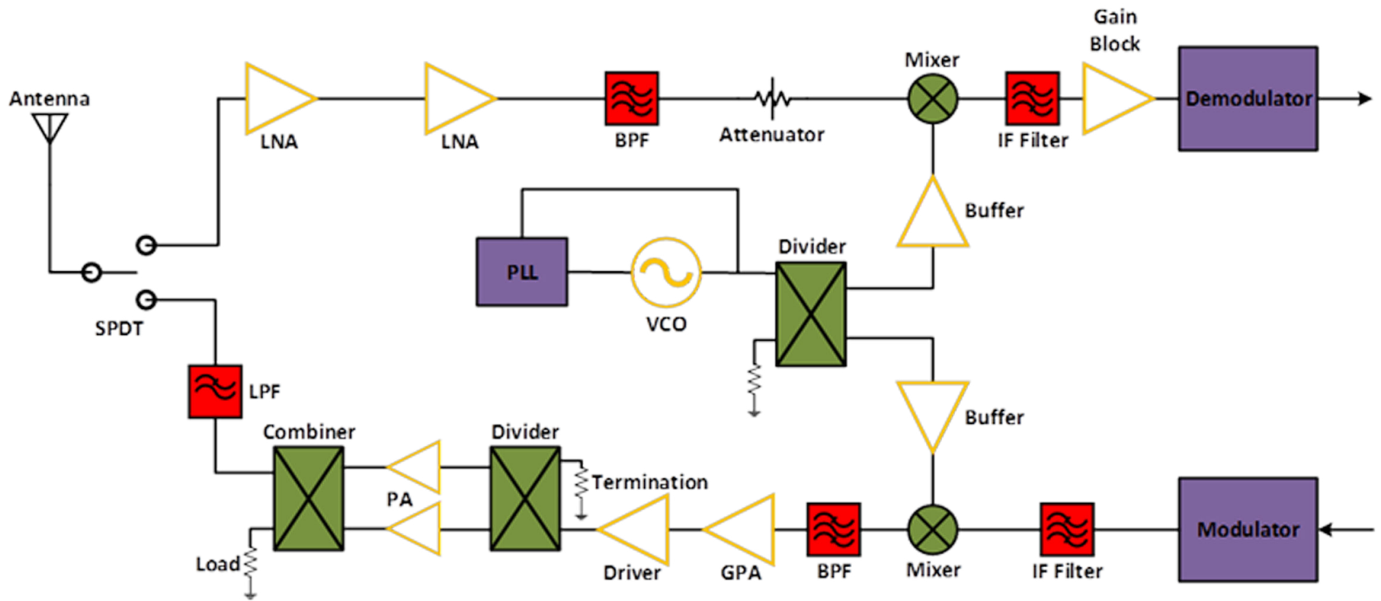
Waveguide Low Noise Amplifiers

FM P/N	Waveguide Type	RF Frequency Range (GHz)	Typical Gain (dB)	Typical Gain Flatness (dB)	Noise Figure (dB)	P1dB (Watts)	Max DC Voltage (Volts)	Typ DC Current (mA)	Flange Type	ECCN
FMWGA3206 	WR-10	75 - 110	25		5.5		8	180	UG-387/U-Mod	3A001.b.4.e.3
FMWGA3205 	WR-12	60 - 90	30		4.5	8	8	225	UG-387/U	EAR99
FMWGA3204 	WR-15	50 - 75	30		5		8	175	UG-385/U	EAR99
FMWGA3203 	WR-19	40 - 60	30		4.5	15	8	350	UG-383/U-Mod	EAR99
FMWGA3202 	WR-22	33 - 50	30		5.5	10	8	300	UG-383/U	EAR99
FMWGA3208 	WR-28	26.5 - 40	22	0.75	3	13.5	15	125	UG-599/U	EAR99
FMWGA3201 	WR-28	26.5 - 40	30		3		8	375	UG-599/U	EAR99

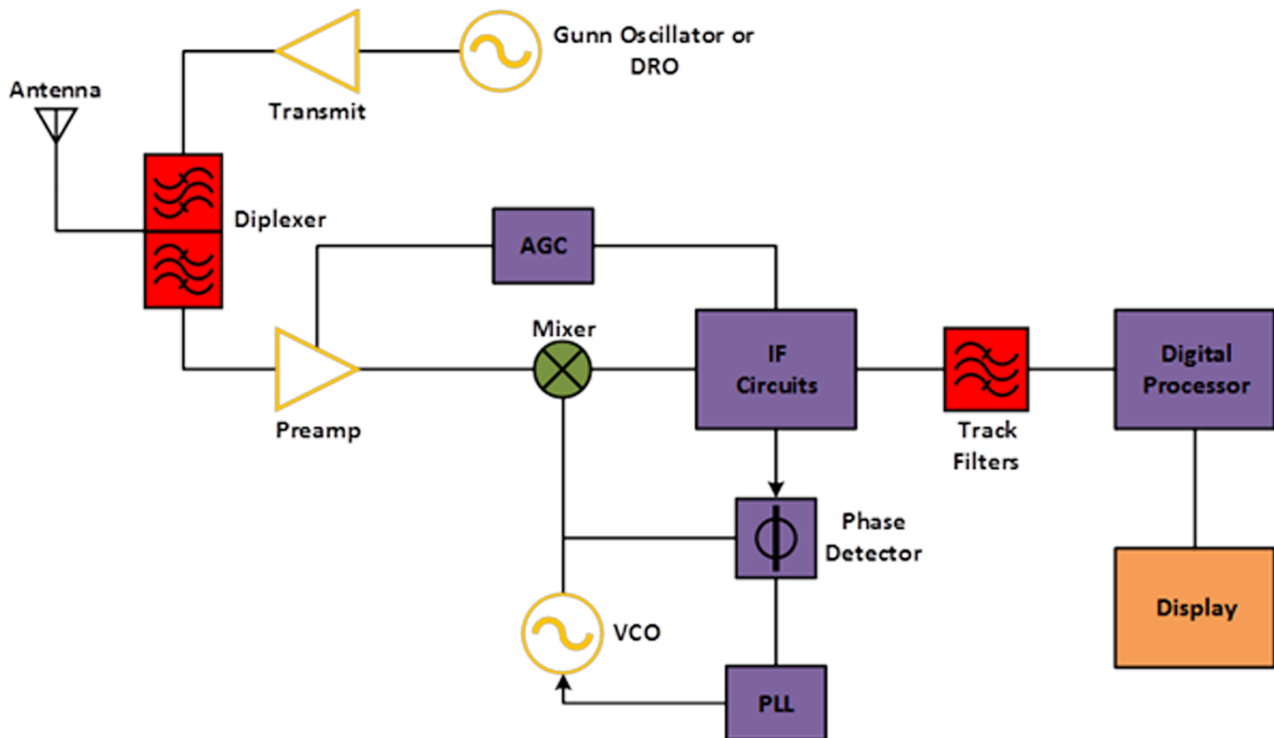
Recommended Amplifier Power-Up Precautions

1. Confirm that proper ESD precautions and controls are always in place before handling any Amplifier module
2. Confirm adequate thermal management is in place to effectively dissipate heat away from the Amplifier package. The Amplifier operational baseplate temperature must be within the operational temperature range stated in the Amplifier datasheet. Depending on the design and thermal requirements, using a heatsink with cooling fan is always recommended for safe reliable operation. A heat sink without a cooling fan may also be used. Damage caused from overheating will void the warranty.
3. Confirm adequate system grounding is established. The DC power supply and Amplifier must have a common ground in order to operate properly.
4. Power Amplifiers may require additional DC Current when initially powered-up. Depending on the design, the input current draw could range from an additional 10% to 100% above the maximum rated DC current of the Amplifier. This varies based on product part number.
5. Confirm the DC power supply, if limited, is set to allow for additional start-up current that's rated for the Power Amplifier.
6. Confirm the system is designed and calibrated for 50 ohms. Any impedance mismatch may cause performance issues.
7. Perform a CALIBRATION (if required) with the loads before connecting the Amplifier to the Network Analyzer to ensure proper performance.
8. Use a fixed attenuator between the signal source and input port of the Amplifier to optimize the input VSWR match.
9. Confirm the input power level at the input port of the amplifier does not exceed the maximum rated limit for input power (as stated in the Amplifier datasheet).
 P_{in} for Small Signal Gain = P1dB-SSG-10 dB
 P_{in} for P1dB = P1dB-SSG+1 dB
10. Confirm the Network Analyzer is always connected to the Amplifier first before DC power is applied to the Amplifier.
11. As long as the input and output ports of the amplifier are connected to a 50Ohm load and RF signal power is applied, the Amplifier can be powered up with DC voltage.
12. Confirm the Amplifier output load is matched for a 50 ohm impedance and will not exceed the maximum rated VSWR or Return Loss limit for the Amplifier. Exceeding the maximum rated VSWR or Return Loss limit will result in reflected signal power that could damage the Amplifier and void the warranty.
13. **Power Amplifier connected to an Antenna for signal transmission** - It's strongly recommended to use a high power fixed attenuator pad or an Isolator between the output port of the Amplifier and input port to the antenna. Any reflected signal power due to impedance mismatch will likely damage the Amplifier and void the warranty.
14. The attenuator or isolator used at the output port of the Amplifier must be rated to handle the output power level and operational frequency band of the amplifier.

RF Transceiver



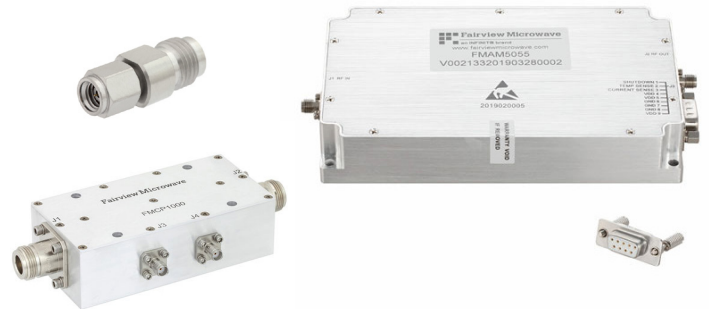
Radar



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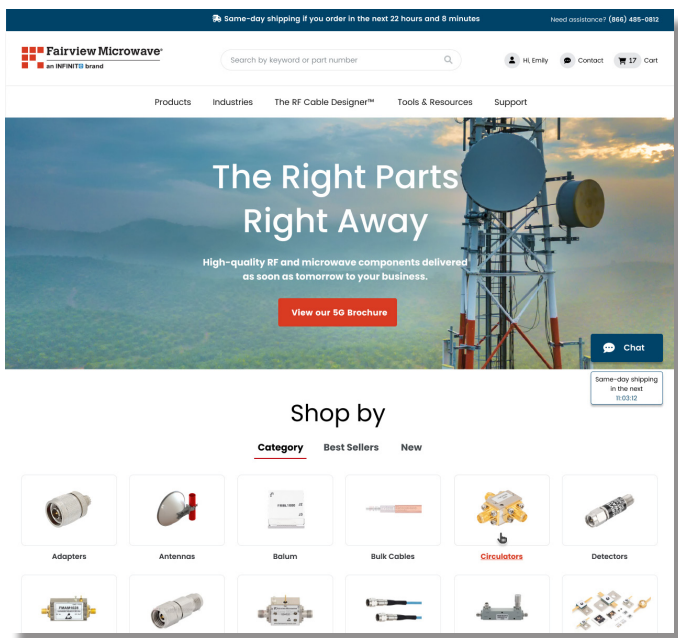


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We know that having the correct parts shipped directly to you the same day you order them can mean the difference between project success and failure. That's why Fairview maintains an inventory of thousands of RF products including adapters, connectors, amplifiers, attenuators, coaxial cables, waveguide, terminations and more. In addition, Fairview holds an extensive component inventory to build custom cable assemblies that can be designed to your exact specifications and shipped same day.

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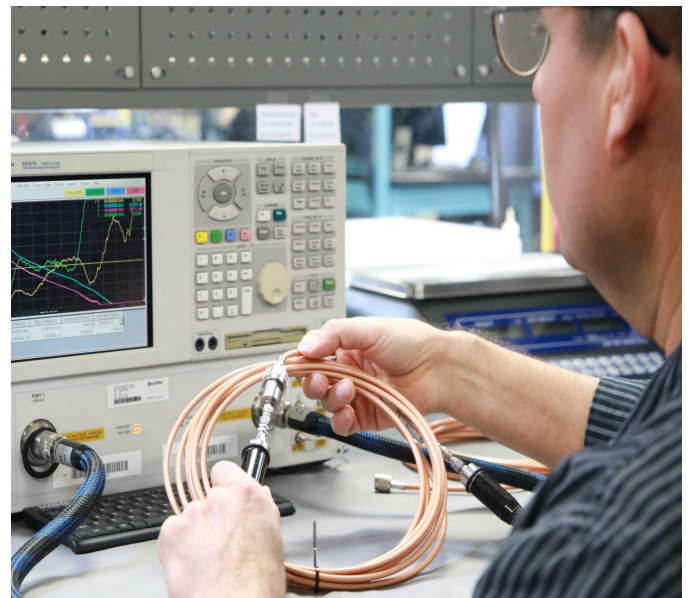
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- Hi Pot testing to 5,000 volts DC and 6,000 volts AC



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