

High Performance Connectorized Amplifiers

Typical and Guaranteed Specifications—50 Ω System

Model	Frequency Range MHz	Small Signal Gain dB			Gain Flatness ±dB		Noise Figure dB			Power Output At 1dB Compression dBm			Rev. Iso. dB	Intercept Point dBm	SWR In/Out		D.C.	
		Typ.	Min. 0/50C	Min. -55/85C	Max. 0/50C	Max. -55/85C	Typ.	Max. 0/50C	Max. -55/85C	Typ.	Min. 0/50C	Min. -55/85C			Typ.	3rd/2nd Typ.	Max. 0/50C	Max. -55/85C
Cascaded Amplifiers • Standard and Power Pack SMA Connectorized Packages																		
A2C5119	10-500	23.8	23.0	22.0	0.6	0.8	2.7	3.4	3.7	19.0	17.5	17.0	35	33/46	1.7	1.9	15	82
A2C5120	10-800	26.5	25.0	23.5	0.7	0.9	3.2	4.0	4.5	19.0	18.0	17.5	34	34/43	1.9	2.0	15	102
A2C5127	10-500	26.5	25.0	24.0	0.7	0.9	2.5	3.5	4.0	27.0	25.0	24.5	36	39/45	1.9	2.0	15	220
A4P5130	10-500	37.5	36.0	35.0	0.7	0.9	2.7	3.2	3.7	30.0	29.0	28.0	55	42/54	2.2	2.4	15	522
A2P1220	30-1200	31.5	29.0	27.5	0.7	1.0	4.3	5.5	6.0	29.7	29.0	(28.5)	53	40/53	1.8	2.0	15	500
A2C1221	10-1000	40.5	39.0	37.0	0.9	1.0	2.6	3.5	4.0	21.5	19.5	19.0	55	33/42	1.8	2.0	15	143
A4C1222	10-1000	46.0	44.0	42.0	0.9	1.2	3.6	4.5	5.0	22.0	20.0	19.5	65	34/44	1.8	2.0	15	206
A2C1611	1200-1700	38.0	37.0	36.0	0.6	0.7	1.0	1.3	1.8	17.5	16.8	16.0	58	27/30	1.9	2.0	8	122
A2P2010	30-2000	19.2	17.5	16.5	0.7	0.8	5.0	7.0	7.5	29.5	29.0	(28.5)	37	40/55	1.9	2.0	15	555
A2P2020	50-2000	27.5	25.5	24.5	0.7	0.8	5.4	7.0	7.5	29.5	29.0	(28.5)	52	42/55	1.9	2.0	15	653
A2C2115	10-2000	27.5	25.5	24.5	0.8	1.0	3.0	3.5	4.0	15.0	14.0	14.0	49	27/43	1.9	2.0	15	115
A4C2123	10-2000	42.0	38.0	36.0	0.9	1.2	3.1	3.7	4.2	23.5	22.5	22.0	53	33/50	1.9	2.0	15	233
A4C2124	10-2000	32.4	30.0	28.0	1.5	1.6	2.9	3.5	4.0	24.5	22.5	22.0	50	36/51	1.9	2.0	15	230
A2P2127	10-2000	22.0	20.0	18.5	0.9	1.0	3.3	3.8	4.3	27.0	25.5	25.0	37	39/47	1.9	2.0	15	315
A2P2128	50-2000	27.0	25.0	23.5	0.7	1.0	3.2	3.7	4.2	27.5	26.3	25.8	49	39/55	1.9	2.0	15	333
A2P2130	30-2000	21.0	19.0	17.5	0.9	1.2	3.5	4.0	4.5	30.0	29.0	(28.5)	40	41/55	1.9	2.0	15	495
A2P2510	10-2500	19.0	18.0	17.0	0.8	0.9	4.7	5.2	5.7	27.5	26.0	(25.5)	35	37/52	1.9	2.0	15	285
A2P2520	100-2500	36.0	33.0	32.0	1.0	1.2	3.5	4.5	5.0	27.5	26.5	(26.0)	63	38/53	1.9	2.0	15	363
A2C3110	10-3000	19.0	17.5	17.0	1.0	1.2	3.0	4.0	4.5	22.0	20.5	20.0	33	33/43	1.9	2.0	15	172
A4C3120	10-3000	30.0	28.0	27.0	1.0	1.2	3.4	4.5	5.0	21.0	20.0	19.5	50	35/65	1.9	2.0	15	240
A4C3125	10-3000	33.0	31.0	29.0	2.0	2.5	3.8	4.0	4.5	25.5	24.5	24.0	52	39/52	2.2	2.3	15	301
A4P3129	500-3000	28.3	27.0	25.0	0.8	1.0	4.0	5.0	5.5	29.0	28.3	(27.8)	50	37/42	1.9	2.0	15	575
A2P3527	100-3500	28.5	26.5	24.0	0.8	1.0	3.5	4.5	5.0	27.0	26.0	25.5	50	36/42	1.9	2.0	15	355
A2P4022	800-4000	33.0	30.0	29.0	1.0	1.2	4.0	5.0	5.5	21.8	20.5	20.0	60	34/53	1.9	2.0	15	285
A2C4110	100-4000	16.6	15.0	14.0	1.0	1.2	5.2	6.0	6.5	21.5	20.5	20.0	33	34/54	1.9	2.0	15	230

Model	Frequency Range GHz	Small Signal Gain dB			Gain Flatness ±dB		Noise Figure dB			Power Output At 1dB Compression dBm			Rev. Iso. dB	Intercept Point dBm	SWR In/Out		D.C.	
		Typ.	Min. 0/50C	Min. -55/85C	Max. 0/50C	Max. -55/85C	Typ.	Max. 0/50C	Max. -55/85C	Typ.	Min. 0/50C	Min. -55/85C			Typ.	3rd/2nd Typ.	Max. 0/50C	Max. -55/85C
Single-stage, Two-stage and Three-stage SMA Connectorized Packages																		
A2CP104	1-100 MHz	8.4	7.8	7.3	0.3	0.7	1.5	1.9	2.4	22.5	21.0	20.0	11	40/55	1.5	1.6	15	43
A2CP4121	0.3-4.0	29.0	27.0	25.5	0.8	1.2	2.2	3.0	3.5	21.5	20.0	19.0	55	31/40	1.9	2.0	15	205
A2CP4122	0.8-4.0	37.5	36.5	35.0	1.0	1.2	2.3	3.0	3.5	21.5	20.0	19.0	60	33/47	1.9	2.0	15	207
A2CP5008	2.0-5.0	12.0	10.5	10.0	1.0	1.2	3.0	3.7	4.2	24.5	23.5	23.0	24	35/50	1.7	1.7	12	250
A2CP5009	2.0-5.0	8.5	7.5	7.0	1.0	1.2	5.5	6.0	6.5	29.5	28.5	28.0	22	42/60	2.0	2.0	15	370
A2CP5021	1.0-5.0	34.0	32.0	31.0	0.8	1.2	2.3	3.0	3.5	21.5	20.0	19.0	79	34/49	1.9	2.0	15	250
A2CP5121	0.3-5.0	28.5	26.0	24.0	1.0	1.2	2.2	3.0	3.5	20.5	19.5	18.0	54	30/40	1.9	2.0	15	205
A2CP6008	2.0-6.0	11.0	10.0	9.5	1.5	1.8	3.0	3.7	4.2	24.0	23.0	22.5	23	34/50	1.7	1.7	12	250
A3CP6025	0.01-6.0	24.0	23.5	23.0	1.2	1.3	4.5	5.5	6.0	25.0	24.0	23.5	50	34/54	2.0/2.4	2.3/2.8	15	300
A2CP6115	0.5-6.0	27.0	25.0	23.5	0.8	1.2	4.5	5.5	6.0	15.5	14.0	13.5	71	27/45	1.9	2.0	15	210
A2CP6120	1.0-6.0	29.0	27.0	25.0	0.8	1.2	4.5	5.5	6.0	21.0	19.0	18.5	70	31/54	1.9	2.0	15	240
A2CP6139	1.5-6.0	13.0	12.5	12.0	0.75	1.0	4.0	4.5	5.0	33.0	32.5	32.0	40	42/57	1.8	2.0	15	1500
A2CP6239	2.0-6.0	13.0	12.5	12.0	0.75	1.0	4.0	4.5	5.0	33.0	32.5	32.0	40	42/57	1.8	2.0	15	1500
ACP7019	3.0-7.0	14.0	13.2	12.7	0.6	0.8	3.1	3.8	5.2	27.5	26.5	26.0	24	35/55	1.9	2.0	12	250
A3CP7029	3.0-7.0	27.5	26.0	25.0	1.0	1.2	3.6	4.3	4.8	27.5	26.5	26.0	48	33.5/51	1.9	2.0	12	425

Current data sheets available on website. Shaded models indicate typical output power ≥+20 dBm. () Indicates minimum temperature at -55/+71°C.

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Model	Frequency Range GHz	Small Signal Gain dB			Gain Flatness ±dB		Noise Figure dB			Power Output At 1dB Compression dBm			Rev. Iso. dB	Intercept Point dBm	SWR In/Out		D.C.	
		Typ.	Min. 0/50C	Min. -55/85C	Max. 0/50C	Max. -55/85C	Typ.	Max. 0/50C	Max. -55/85C	Typ.	Min. 0/50C	Min. -55/85C			Typ.	3rd/2nd Typ.	Max. 0/50C	Max. -55/85C
Single-stage, Two-stage and Three-stage SMA Connectorized Packages																		
ACP8017	3.0-8.0	11.5	11.0	10.5	0.7	1.0	4.2	5.2	5.7	21.5	20.0	21.0	27	31/48	1.9	2.0	12	125
A3CP8027	3.0-8.0	23.0	22.0	21.3	1.3	1.4	4.0	5.0	5.5	21.5	20.0	21.0	50	32/48	1.9	2.0	12	225
ACP8036	2.0-8.0	12.0	11.0	10.5	0.8	1.5	4.2	4.8	5.3	25.5	24.0	23.5	28	35/52	1.9	2.0	12	150
ACP8037	2.0-8.0	12.0	11.0	10.5	0.8	1.5	4.2	4.8	5.3	28.0	26.5	26.0	28	34/50	1.9	2.0	12	250
ACP8039	2.0-8.0	10.8	10.0	9.5	0.8	1.5	4.0	4.5	5.0	30.0	28.5	28.0	27	38/56	1.6	1.7	12	410
A3CP8048	2.0-8.0	23.5	22.5	21.5	0.8	1.0	4.4	5.0	5.5	28.0	26.5	26.0	55	40/55	1.8	1.9	12	400
A3CP8049	2.0-8.0	22.5	21.5	20.5	0.8	1.0	4.4	5.0	5.5	30.0	28.5	28.0	55	38/55	1.8	1.9	12	550
ACP11039	5.0-11.0	8.5	7.5	7.0	0.8	1.0	4.0	6.0	6.5	30.0	28.5	28.0	25	38/56	1.9	2.0	12	410
A2CP11039	5.0-11.0	12.0	11.5	11.0	0.75	1.0	4.0	4.5	5.0	33.0	32.5	32.0	40	42/57	1.8	2.0	15	1500
A2CP11049	6.0-11.0	18.5	17.5	16.5	0.8	1.0	4.0	4.5	5.0	30.0	28.5	28.0	52	38/56	1.8	2.0	12	590
ACP12013	6.0-12.0	13.0	11.5	11.0	0.8	1.0	3.2	3.7	4.2	13.0	12.5	12.0	22	28/47	2.0	2.0	8	43
ACP12015	6.0-12.0	12.5	11.5	11.0	0.8	1.0	2.5	3.0	3.5	21.0	20.0	19.5	25	32/43	1.9	2.0	8	75
ACP12017	6.0-12.0	12.5	11.0	10.5	1.0	1.2	3.3	3.8	4.5	25.5	23.5	22.5	23	37/57	1.9	2.0	10	105
ACP12019	6.0-12.0	10.5	9.5	8.5	1.0	1.2	4.1	4.6	5.1	28.0	26.5	26.0	24	39/52	2.0	2.0	10	210
A2CP12024	6.0-12.0	24.0	23.0	22.5	1.5	1.7	3.2	3.7	4.2	13.5	12.5	12.0	35	20/30	2.0	2.0	8	90
A2CP12026	6.0-12.0	25.0	24.0	23.5	1.5	1.7	2.5	3.0	3.5	21.0	20.0	19.5	50	28/45	2.0	2.0	8	117
A2CP12028	6.0-12.0	24.5	23.0	22.5	1.5	1.6	3.3	3.8	4.5	25.0	23.5	23.0	45	34/52	1.8	1.9	10	162
A2CP12029	6.0-12.0	23.0	20.5	20.0	1.0	1.2	4.0	4.5	5.0	27.5	26.5	26.0	35	37/51	2.0	2.0	10	350
ACP14012	6.0-14.0	10.5	10.0	9.5	1.0	1.0	3.0	4.0	4.5	14.5	13.0	12.5	20	26/45	2.0	2.0	5	43
ACP14016	6.0-14.0	11.2	10.5	9.5	0.8	1.3	3.2	4.0	4.5	16.0	14.0	13.5	21	26/35	2.0	2.0	5	65
ACP14021	6.0-14.0	10.3	9.7	9.0	0.6	0.6	3.8	4.5	6.0	25.0	23.5	23.0	25	33/50	2.0/1.8	2.0/1.9	12	117
ACP14025	8.0-14.0	8.5	7.5	7.0	0.8	1.0	3.8	5.0	5.5	28.5	27.5	27.0	25	42/60	2.0/1.7	2.0/1.8	12	250
ACP14029	8.0-14.0	6.5	5.5	5.0	1.0	1.0	5.0	6.5	7.0	29.0	28.3	27.9	25	43/62	2.0	2.0	12	350
A2CP14212	8.0-14.0	22.5	21.5	21.0	1.0	1.0	2.8	3.8	4.2	15.5	15.0	14.0	43	28/40	2.0	2.0	5	85
A2CP14216	8.0-14.0	24.0	23.0	22.0	1.0	1.0	2.8	3.5	4.0	19.0	18.0	17.0	45	30/42	2.0	2.0	5	130
A2CP14221	8.0-14.0	21.3	20.2	19.0	1.5	1.5	3.2	4.0	5.0	25.0	23.0	22.5	45	33/43	2.0	2.0	12	185
A2CP14225	8.0-14.0	18.0	16.5	15.0	0.8	1.0	4.5	5.0	6.0	28.0	27.0	26.5	45	40/54	2.0	2.0	12	330
A2CP14229	8.0-14.0	14.0	12.0	11.5	1.0	1.0	6.0	6.5	7.0	29.0	28.3	27.9	25	42/60	1.8	2.0	12	560
A2CP14639	6.0-14.0	11.0	10.5	10.0	0.75	1.0	4.0	4.5	5.0	33.0	32.5	32.0	40	42/57	1.8	2.0	15	1500
ACP16012	6.0-16.0	9.5	8.5	8.0	1.0	1.0	3.5	4.7	5.2	15.2	13.5	13.0	23	27/40	2.0	2.0	5	45
ACP16016	6.0-16.0	10.5	9.5	8.5	1.0	1.0	3.5	4.5	5.6	15.3	14.0	13.5	27	26/38	2.0	2.0	5	65
ACP16021	8.0-16.0	9.5	8.5	8.0	0.7	0.7	3.4	4.5	5.2	24.0	22.0	21.5	25	30/45	2.0/1.7	2.0/1.8	12	117
ACP16025	8.0-16.0	7.5	6.5	6.0	1.0	1.0	4.3	5.5	6.0	29.0	28.0	27.5	20	42/65	2.0/1.6	2.0/1.8	12	253
A2CP16212	6.0-16.0	19.0	18.4	17.0	1.5	1.5	3.2	3.7	4.2	15.0	13.5	13.0	45	28/39	2.0	2.0	5	90
A2CP16216	6.0-16.0	20.0	18.7	17.5	1.5	1.5	3.5	4.2	5.0	15.3	14.0	13.5	35	25/37	2.0	2.0	12	125
A2CP16221	8.0-16.0	20.0	18.5	17.5	1.1	1.2	3.8	4.5	5.0	24.0	22.7	21.7	50	32/40	2.0	2.1	12	179
A2CP16225	8.0-16.0	17.0	15.0	14.5	1.5	1.5	4.2	4.7	5.2	28.0	26.5	26.0	35	36/48	2.0	2.0	12	325
ACP18012	8.0-18.0	8.5	7.5	7.0	0.8	1.0	4.0	5.0	5.5	15.0	13.5	13.0	23	25/38	2.0	2.0	5	45
ACP18015	8.0-18.0	9.2	8.5	8.0	0.8	1.0	4.0	5.0	5.5	15.5	14.0	13.5	25	23/31	2.0	2.0	5	63
ACP18021	10.0-18.0	8.5	7.0	6.5	1.0	1.0	4.0	5.7	7.5	23.5	21.5	21.0	20	30/41	2.0	2.0	12	115
ACP18025	10.0-18.0	6.5	5.7	5.2	1.2	1.2	5.0	6.8	7.6	25.5	24.0	23.5	20	36/45	2.0	2.0	12	250
A2CP18212	8.0-18.0	17.0	16.0	15.0	1.5	1.5	4.4	5.7	7.3	15.0	13.0	11.5	35	24/39	2.0	2.0	12	90
A2CP18216	8.0-18.0	18.0	17.2	16.6	1.5	1.5	4.4	5.7	7.3	16.0	14.0	12.0	35	22/34	2.0	2.0	12	125
A2CP18221	10.0-18.0	17.5	16.5	16.0	1.5	1.5	4.4	5.7	7.5	23.5	21.5	21.0	35	30/41	2.0	2.0	12	185
A2CP18225	10.0-18.0	15.0	13.5	13.0	1.5	1.5	4.5	6.0	7.5	25.5	24.0	23.5	35	35/44	2.0	2.0	12	325
ACP20015	2.0-20.0	10.0	9.0	8.5	1.3	1.5	4.5	5.5	6.0	16.0	15.0	14.0	30	26/29	2.0	2.0	5	76
ACP20215	2.0-20.0	20.0	18.5	17.0	1.3	1.3	4.8	5.8	6.3	18.0	15.0	14.0	55	28/45	2.0	2.1	5	156

Current data sheets available on website. Shaded models indicate typical output power $\geq +20$ dBm.

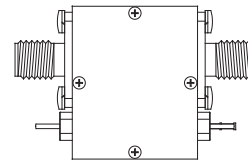
MTS High Performance Connectorized Amplifiers

Guaranteed Specifications at 0° to 50° C Case Temperature, V_b+15 VDC

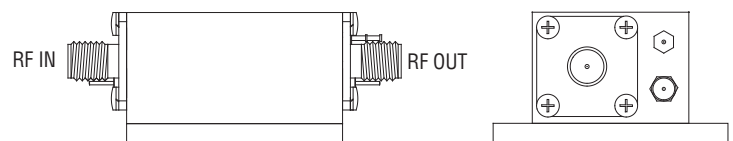
Model	Frequency Response (Mhz) Min.	Gain (dB) Min.	Noise Figure (dB) Max.	Power Output at 1 dB Gain Comp (dBm) Min.	Gain Flatness (±dB) Max.	3rd Order Intercept (dBm) Typical	VSWR 50 Ohms In/Out :1 Maximum	Input Bias Current (mA) Typical	Case* Type
Models listed by Model Number									
UTC5-200-X	10-500	25	2.7	6.0	1.5	22	2.0	35	TC-2
UTC5-201-X	10-500	35	2.7	7.0	1.5	20	2.0	33	TC-2
UTC5-202-X	10-500	48	2.7	6.0	1.5	18	2.0	60	TC-2
UTC5-203-X	10-500	62	2.7	6.0	2.0	18	2.0	70	TC-4
UTC5-210-X	10-500	26	3.0	14.0	1.5	30	2.0	78	TC-2
UTC5-211-X	10-500	36	3.5	14.0	1.5	30	2.0	76	TC-2
UTC5-212-X	10-500	45	2.7	14.0	1.5	27	2.0	80	TC-2
UTC5-213-X	10-500	52	2.7	14.0	2.0	27	2.0	92	TC-2
UTC5-214-X	10-500	65	2.7	14.0	2.0	27	2.0	103	TC-4
UTC5-220-X	10-500	23	3.5	22.5	1.5	30	2.0	165	TC-2
UTC5-221-X	10-500	33	3.0	22.5	2.0	30	2.0	190	TC-4
UTC5-222-X	10-500	44	3.0	22.5	2.0	30	2.0	193	TC-4
UTC5-223-X	10-500	58	3.0	22.5	2.0	30	2.0	210	TC-4
UTC10-210-X	10-1000	20	4.5	11.0	2.0	28	2.0	60	TC-2
UTC10-211-X	10-1000	29	3.7	9.0	1.5	20	2.0	37	TC-2
UTC10-212-X	10-1000	39	3.7	9.0	2.0	20	2.0	62	TC-4
UTC10-213-X	10-1000	50	3.7	12.0	2.0	27	2.0	101	TC-4
UTC10-220-X	20-1000	21	5.0	20.0	1.5	30	2.0	125	TC-2
UTC10-221-X	10-1000	31	4.5	20.0	2.0	30	2.0	150	TC-4
UTC10-222-X	10-1000	40	3.7	20.0	2.0	30	2.0	155	TC-4
UTC10-223-X	10-1000	47	3.7	20.0	2.0	30	2.0	163	TC-4
UTC20-210-X	10-2000	18	5.0	7.0	1.5	17	2.2	41	TC-2
UTC20-211-X	10-2000	26	5.0	14.0	2.0	29	2.2	91	TC-4
UTC20-212-X	10-2000	32	6.0	14.0	2.0	29	2.2	104	TC-4
UTC20-213-X	10-2000	38	6.0	12.0	2.0	29	2.2	126	TC-4

Dash No.	Type	RF In	RF Out
-1	SMA	FEMALE	FEMALE
-2	N	FEMALE	FEMALE
-3	BNC	FEMALE	FEMALE
-4	TNC	FEMALE	FEMALE
-5	SMA	MALE	MALE
-6	SMA	MALE	FEMALE
-7	SMA	FEMALE	MALE
-8	SMA/N	FEMALE	FEMALE

TC-1A



TC-2, TC-4



Current data sheets available on website. Shaded models indicate typical output power ≥+20 dBm.