

AFT Series Miniature Amplifiers 0.1 to 18 GHz



Features

- Avanpak™ Package
- Removable Connectors (Miniature Series)
- 0.1 to 18.0 GHz (Octave/Multi-octave)
- Economically Priced (General Purpose)

AFT Avanpak Series

AFT amplifiers are general purpose amplifiers, suitable for a wide range of applications in commercial and military systems where low to medium gain "amplifier blocks" are required.

AFTs are compact and rugged and may be designed into commercial and military systems where stringent environments are encountered.

The Avanpak flatpak package is suitable for conventional chassis mounting using connectors and cables and, when the RF connectors are removed, is ideal for use in microstrip or stripline integration.

The AFT series is economically priced to facilitate its wide usage, and most models are readily available from stock from AVANTEK'S distributor network.

AMT/AWT Series 0.5 to 20 GHz



Features

- High Performance, Wide Band
- 0.5 to 20 GHz
- Low Noise Figure
- Wide Dynamic Range

AMT/AWT Series

The AMT/AWT series provides premium performance over octave (AMT) and multi-octave (AWT) bands at 25°C. Temperature compensated amplifiers are specified over full military temperature ranges up to +100°C.

AMT/AWT series amplifiers are ideal for specification in performance driven applications in commercial and military systems. These amplifiers have a wide range of gain options, typically up to 45-50 dB, and are optimized for noise figure and dynamic range, consistent with the best technology available. A complete range of performance specifications is standard on these series and they are guaranteed over the specified temperature range.

The rugged I-series case is designed for chassis mounting and conventional connector/cable system integration.

The MA-series case is equivalent to the Avanpak flatpak package outline and is designed to withstand the same rugged environments as the I-series cases. They are suitable for conventional chassis mounting, using connectors and cables and, when the RF connectors are removed, are ideal for use in microstrip or stripline integration.

AFT — Avanpak Series Amplifiers, Connectorized or Stripline Compatible

AWT — High Performance and Temperature Compensated Connectorized Amplifier Series

AFT Series — Silicon MMICs – Ultrawideband, Low Cost

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Typical Gain (dB)	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Typical (mA)	Case Type
AFT-4001	0.1-4.0	7	8.0 Typ.	7.0/8.0	+6	0.5	+17	2.0	2.0	50 Typ.	AS2
AFT-4002	0.1-4.0	14	16.0 Typ.	7.0/8.0	+6	0.9	+17	2.0	2.0	100 Typ.	AS2
AFT-4003	0.1-4.0	21	24.0 Typ.	7.0/8.0	+6	1.25	+17	2.0	2.0	150 Typ.	AS4

AWT Series — GaAs FETs – Ultrawideband, High Performance

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
AWT-4532	0.5-4.5	18	22	3.5/3.8	+12	0.75	+21	2.0	2.0	110	IS2
AWT-4533	0.5-4.5	27	33	3.5/3.8	+12	1.0	+21	2.0	2.0	150	IS4
AWT-4534	0.5-4.5	36	44	3.5/3.8	+12	1.0	+21	2.0	2.0	200	IS4

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AFT—Avanpak Series Amplifiers, Connectorized or Stripline Compatible

AWT—High Performance and Temperature Compensated Connectorized Amplifier Series

AFT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Typical Gain (dB)	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Typical (mA)	Case Type
AFT-2031	0.5-2.0	10	10.5 Typ.	3.3/3.5	+11	0.5	+21	2.0	2.0	60 Typ.	AS2
AFT-2032	0.5-2.0	20	21.0 Typ.	3.5/3.7	+13	0.7	+23	2.0	2.0	120 Typ.	AS2
AFT-2033	0.5-2.0	30	32.0 Typ.	3.5/3.7	+13	1.0	+23	2.0	2.0	180 Typ.	AS4
AFT-2034	0.5-2.0	40	42.0 Typ.	3.5/3.7	+13	1.5	+23	2.0	2.0	250 Typ.	AS4
AFT-2061	0.5-2.0	10	10.5 Typ.	4.5/5.0	+20	0.5	+29	2.0	2.0	180 Typ.	AS2
AFT-2062	0.5-2.0	20	21.0 Typ.	3.5/3.7	+20	0.7	+29	2.0	2.0	250 Typ.	AS2
AFT-2063	0.5-2.0	30	32.0 Typ.	3.5/3.7	+20	1.0	+29	2.0	2.0	300 Typ.	AS4
AFT-2064	0.5-2.0	40	42.0 Typ.	3.5/3.7	+20	1.5	+29	2.0	2.0	350 Typ.	AS4

AWT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
AWT-2071	0.5-2.0	10	13	2.1/2.5	+11	0.50	+20	2.0	2.0	75	IS2
AWT-2072	0.5-2.0	21	26	2.3/2.7	+11	0.75	+20	2.0	2.0	150	IS2
AWT-2073	0.5-2.0	33	40	2.4/2.8	+20	1.00	+29	2.0	2.0	260	IS4
AWT-2032	0.5-2.0	23	27	2.8/3.5	+13	1.25	+21	2.0	2.0	100	IS2
AWT-2033	0.5-2.0	35	40	2.8/3.5	+13	1.25	+21	2.0	2.0	160	IS4
AWT-2034	0.5-2.0	47	53	2.8/3.5	+13	1.25	+21	2.0	2.0	200	IS4
AWT-2053	0.5-2.0	35	40	3.2/3.5	+20	1.25	+28	2.0	2.0	260	IS4
AWT-2054	0.5-2.0	47	53	3.2/3.5	+20	1.25	+28	2.0	2.0	310	IS4

AWT Series—Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

AWT-2082	0.5-2.0	19	23	3.6/4.0	+13	1.50	+21	2.0	2.0	170	IS4
AWT-2083	0.5-2.0	30	34	3.4/3.8	+13	1.75	+21	2.0	2.0	220	IS4
AWT-2084	0.5-2.0	41	46	3.4/3.8	+13	2.00	+21	2.0	2.0	260	IS6
AWT-2042	0.5-2.0	19	23	4.5/4.7	+13	1.50	+21	2.0	2.0	150	IS4
AWT-2043	0.5-2.0	30	34	4.2/4.5	+13	1.75	+21	2.0	2.0	200	IS4
AWT-2044	0.5-2.0	41	46	4.2/4.5	+13	2.00	+21	2.0	2.0	250	IS6
AWT-2063	0.5-2.0	30	34	4.2/4.5	+20	1.75	+28	2.0	2.0	275	IS4
AWT-2064	0.5-2.0	41	46	4.2/4.5	+20	2.00	+28	2.0	2.0	325	IS6

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AFT—Avanpak Series Amplifiers, Connectorized or Stripline Compatible
AMT—High Performance and Temperature Compensated Connectorized Amplifier Series

AFT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Typical Gain (dB)	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out	Input Power Current @ +12 V ¹ Typical (mA)	Case Type
AFT-4231	2-4	11.5	12.0 Typ.	3.6/4.0	+13	1.0	+23	2.0 2.0	75 Typ.	AS2
AFT-4232	2-4	23.0	24.0 Typ.	3.6/4.0	+13	1.0	+23	2.0 2.0	150 Typ.	AS2
AFT-4233	2-4	35.0	36.0 Typ.	3.6/4.0	+13	1.0	+23	2.0 2.0	225 Typ.	AS4
AFT-4234	2-4	47.0	48.0 Typ.	3.6/4.0	+13	1.5	+23	2.0 2.0	300 Typ.	AS4
AFT-4261	2-4	10.0	10.5 Typ.	4.7/5.0	+20	1.0	+29	2.0 2.0	175 Typ.	AS2
AFT-4262	2-4	21.5	22.5 Typ.	3.6/4.0	+20	1.0	+29	2.0 2.0	225 Typ.	AS2
AFT-4263	2-4	34.0	35.0 Typ.	3.6/4.0	+20	1.0	+29	2.0 2.0	275 Typ.	AS4
AFT-4264	2-4	44.5	46.0 Typ.	3.6/4.0	+20	1.5	+29	2.0 2.0	325 Typ.	AS4

AMT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out	Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
NEW AMT-4211	2-4	13.0	16.0	1.2/1.4	+9	0.5	+17	2.0 2.0	65	IS2
NEW AMT-4212	2-4	27.0	31.0	1.2/1.4	+13	0.75	+21	2.0 2.0	115	IS2
NEW AMT-4213	2-4	40.0	45.0	1.2/1.4	+20	1.0	+28	2.0 2.0	225	IS4
AMT-4032	2-4	26.0	30.0	2.0/2.2	+12	1.0	+20	2.0 2.0	125	IS2
AMT-4033	2-4	39.0	44.0	2.0/2.2	+20	1.0	+28	2.0 2.0	225	IS4
AMT-4051	2-4	12.5	15.5	3.3/3.8	+20	1.0	+28	2.0 2.0	120	IS2
AMT-4052	2-4	26.0	30.0	2.3/2.7	+20	1.0	+28	2.0 2.0	175	IS2
AMT-4053	2-4	39.0	44.0	2.3/2.7	+20	1.0	+28	2.0 2.0	225	IS4
AMT-4054	2-4	52.0	58.0	2.3/2.7	+20	1.0	+28	2.0 2.0	280	IS4

AMT Series — Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

AMT-4082	2-4	22	26	3.2	+15	1.50	+23	2.0 2.0	225	IS4
AMT-4083	2-4	34	38	2.9	+20	1.75	+28	2.0 2.0	330	IS4
AMT-4084	2-4	46	51	2.9	+20	2.00	+28	2.0 2.0	380	IS6
AMT-4062	2-4	22	26	5.0	+20	1.50	+28	2.0 2.0	280	IS4
AMT-4063	2-4	34	38	3.8	+20	1.75	+28	2.0 2.0	330	IS4
AMT-4064	2-4	46	51	3.8	+20	2.00	+28	2.0 2.0	380	IS6

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AFT— Avanpak Series Amplifiers, Connectorized or Stripline Compatible

AWT— High Performance and Temperature Compensated Connectorized Amplifier Series

AFT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Typical Gain (dB)	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Typical (mA)	Case Type
AFT-6231	2-6	8.5	9.0 Typ.	3.3/3.7	+10	0.7	+20	2.0	2.0	60 Typ.	AC2
AFT-6232	2-6	18.0	19.0 Typ.	3.6/4.0	+12	1.0	+22	2.0	2.0	125 Typ.	AC2
AFT-6233	2-6	27.5	28.5 Typ.	3.6/4.0	+12	1.0	+22	2.0	2.0	200 Typ.	AC4
AFT-6234	2-6	37.0	38.5 Typ.	3.6/4.0	+12	1.5	+22	2.0	2.0	275 Typ.	AC4
AFT-6261	2-6	7.0	8.0 Typ.	5.5/6.0	+20	0.7	+29	2.0	2.0	175 Typ.	AC2
AFT-6262	2-6	15.0	16.0 Typ.	6.0/6.5	+20	1.0	+29	2.0	2.0	300 Typ.	AC2
AFT-6263	2-6	24.5	26.0 Typ.	5.0/5.5	+20	1.0	+29	2.0	2.0	350 Typ.	AC4
AFT-6264	2-6	33.5	35.0 Typ.	4.5/5.0	+20	1.5	+29	2.0	2.0	400 Typ.	AC4

AWT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
AWT-6032	2-6	19	23	3.3/3.5	+15	1.00	+23	2.0	2.0	130	IC2
AWT-6033	2-6	28	33	3.3/3.5	+15	1.00	+23	2.0	2.0	190	IC4
AWT-6034	2-6	38	44	3.3/3.5	+15	1.25	+23	2.0	2.0	250	IC4
AWT-6035	2-6	48	55	3.3/3.5	+15	1.50	+23	2.0	2.0	310	IC6
AWT-6052	2-6	18	23	5.0/6.0	+23	1.25	+31	2.0	2.0	300	IC2
AWT-6053	2-6	27	33	3.6/4.0	+23	1.25	+31	2.0	2.0	350	IC4
AWT-6054	2-6	36	43	3.2/3.5	+23	1.50	+31	2.0	2.0	400	IC4
AWT-6055	2-6	46	54	3.2/3.5	+23	2.00	+31	2.0	2.0	460	IC6

AWT Series — Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

AWT-6043	2-6	24	28	4.8	+15	1.75	+23	2.0	2.0	230	IC4
AWT-6044	2-6	31	36	4.5	+15	2.00	+23	2.0	2.0	280	IC6
AWT-6045	2-6	40	45	4.5	+15	2.25	+23	2.0	2.0	340	IC6
AWT-6063	2-6	23	28	6.5	+23	2.00	+31	2.0	2.0	420	IC4
AWT-6064	2-6	31	37	5.0	+23	2.25	+31	2.0	2.0	460	IC6
AWT-6065	2-6	38	45	4.5	+23	2.50	+31	2.0	2.0	540	IC6

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AFT—Avanpak Series Amplifiers, Connectorized or Stripline Compatible
AWT—High Performance and Temperature Compensated Connectorized Amplifier Series

AFT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Typical Gain (dB)	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Typical (mA)	Case Type
AFT-8231	2-8	6.5	7.0 Typ.	4.3/4.8	+12	0.7	+22	2.0	2.0	100 Typ.	AC2
AFT-8232	2-8	14.0	14.5 Typ.	4.5/5.0	+12	1.0	+22	2.0	2.0	175 Typ.	AC2
AFT-8233	2-8	21.0	22.0 Typ.	4.5/5.0	+12	1.0	+22	2.0	2.0	235 Typ.	AC4
AFT-8234	2-8	28.0	30.0 Typ.	4.5/5.0	+12	1.5	+22	2.0	2.0	300 Typ.	AC4
AFT-8261	2-8	7.5	8.0 Typ.	5.5/6.0	+17	0.7	+26	2.0	2.0	150 Typ.	AC2
AFT-8262	2-8	16.5	17.0 Typ.	5.5/6.0	+17	1.0	+26	2.0	2.0	300 Typ.	AC2
AFT-8263	2-8	23.0	24.0 Typ.	4.7/5.2	+17	1.0	+26	2.0	2.0	375 Typ.	AC4
AFT-8264	2-8	30.0	32.0 Typ.	4.7/5.2	+17	1.5	+26	2.0	2.0	450 Typ.	AC4

AWT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response Minimum	Gain (GHz) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (dBm) Maximum	Typical Third Order Intercept (±dB) (dBm)	VSWR (50 ohms) Point In Out		Input Power Current +12 V ¹ Maximum (mA)	Case Type
AWT-8032	2-8	16	21	4.0/4.2	+15	1.00	+23	2.0	2.0	165	IC2
AWT-8033	2-8	24	31	3.8/4.0	+15	1.25	+23	2.0	2.0	235	IC4
AWT-8034	2-8	33	41	3.8/4.0	+15	1.50	+23	2.0	2.0	320	IC4
AWT-8035	2-8	41	50	3.8/4.0	+15	1.75	+23	2.0	2.0	400	IC6
AWT-8052	2-8	15	20	5.0/6.0	+20	1.00	+28	2.0	2.0	275	IC2
AWT-8053	2-8	23	30	3.9/4.5	+20	1.25	+28	2.0	2.0	350	IC4
AWT-8054	2-8	32	40	3.8/4.0	+20	1.50	+28	2.0	2.0	425	IC4
AWT-8055	2-8	40	49	3.8/4.0	+20	1.75	+28	2.0	2.0	510	IC6

AWT Series — Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

AWT-8043	2-8	18.5	24.5	5.8	+15	1.75	+23	2.0	2.0	270	IC4
AWT-8044	2-8	26.5	32.5	5.5	+15	2.00	+23	2.0	2.0	340	IC6
AWT-8045	2-8	34.0	41.0	5.3	+15	2.25	+23	2.0	2.0	420	IC6
AWT-8063	2-8	18.0	24.0	7.5	+20	2.00	+28	2.0	2.0	400	IC4
AWT-8064	2-8	25.0	32.0	5.7	+20	2.25	+28	2.0	2.0	470	IC6
AWT-8065	2-8	32.5	41.5	5.5	+20	2.50	+28	2.0	2.0	550	IC6

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AFT—Avanpak Series Amplifiers, Connectorized or Stripline Compatible

AMT—High Performance and Temperature Compensated Connectorized Amplifier Series

AFT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Typical Gain (dB)	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out	Input Power Current @ +12 V ¹ Typical (mA)	Case Type
AFT-8431	4-8	8.5	9.0 Typ.	4.0/4.5	+10	1.0	+20	2.0 2.0	75 Typ.	AC2
AFT-8432	4-8	17.0	18.0 Typ.	4.0/4.5	+10	1.0	+20	2.0 2.0	125 Typ.	AC2
AFT-8433	4-8	28.0	29.0 Typ.	3.5/4.0	+12	1.0	+22	2.0 2.0	200 Typ.	AC4
AFT-8434	4-8	37.5	39.0 Typ.	3.5/4.0	+12	1.5	+22	2.0 2.0	250 Typ.	AC4
AFT-8461	4-8	6.5	7.0 Typ.	7.5/8.0	+20	0.7	+29	2.0 2.0	125 Typ.	AC2
AFT-8462	4-8	13.0	14.0 Typ.	7.5/8.0	+20	1.0	+29	2.0 2.0	250 Typ.	AC2
AFT-8463	4-8	24.0	25.0 Typ.	5.0/5.5	+20	1.0	+29	2.0 2.0	300 Typ.	AC4
AFT-8464	4-8	32.0	34.0 Typ.	4.0/4.5	+20	1.5	+29	2.0 2.0	350 Typ.	AC4

AMT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out	Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
AMT-8071	4-8	10	12	2.1/2.5	+6	0.50	+15	2.0 2.0	50	IC2
AMT-8072	4-8	20	24	2.3/2.7	+7	1.00	+15	2.0 2.0	100	IC2
AMT-8073	4-8	30	35	2.3/2.7	+13	1.50	+21	2.0 2.0	175	IC4
AMT-8074	4-8	39	45	2.3/2.7	+18	2.00	+26	2.0 2.0	275	IC4
AMT-8032	4-8	19	23	3.3/3.7	+15	1.00	+23	2.0 2.0	125	IC2
AMT-8033	4-8	29	34	3.0/3.5	+15	1.00	+23	2.0 2.0	180	IC4
AMT-8034	4-8	38	45	3.0/3.5	+15	1.25	+23	2.0 2.0	220	IC4
AMT-8035	4-8	48	56	3.0/3.5	+15	1.50	+23	2.0 2.0	275	IC6
AMT-8052	4-8	18	22	4.0/5.2	+20	1.00	+28	2.0 2.0	200	IC2
AMT-8053	4-8	27	32	3.2/3.8	+20	1.00	+28	2.0 2.0	250	IC4
AMT-8054	4-8	37	44	3.0/3.5	+20	1.25	+28	2.0 2.0	300	IC4
AMT-8055	4-8	46	54	3.0/3.5	+20	1.50	+28	2.0 2.0	350	IC6

AMT Series — Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

AMT-8083	4-8	25.0	29	4.2	+15	1.25	+23	2.0 2.0	230	IC4
AMT-8084	4-8	34.0	39.5	3.8	+15	1.50	+23	2.0 2.0	275	IC6
AMT-8085	4-8	43.0	50	3.8	+15	1.75	+23	2.0 2.0	325	IC6
AMT-8043	4-8	24.0	28	5.0	+15	1.25	+23	2.0 2.0	225	IC4
AMT-8044	4-8	31.5	37	4.5	+15	1.50	+23	2.0 2.0	250	IC6
AMT-8045	4-8	40.0	47	4.5	+15	1.75	+23	2.0 2.0	300	IC6
AMT-8063	4-8	22.0	26	7.0	+20	1.50	+28	2.0 2.0	350	IC4
AMT-8064	4-8	29.0	35	5.2	+20	1.75	+28	2.0 2.0	400	IC6
AMT-8065	4-8	37.0	44	5.0	+20	2.00	+28	2.0 2.0	450	IC6

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AWT —High Performance and Temperature Compensated Connectorized Amplifier Series

AWT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V* Maximum (mA)	Case Type
AWT-11471	4.0-11.0	8	11	2.1/2.5	+7	0.75	+18	2.0	2.0	65	IX2
AWT-11472	4.0-11.0	17	21	2.3/2.7	+7	1.00	+18	2.0	2.0	130	IX2
AWT-11473	4.0-11.0	26	31	2.3/2.7	+13	1.25	+23	2.0	2.0	200	IX4
AWT-11474	4.0-11.0	34	41	2.3/2.7	+20	1.50	+28	2.0	2.0	380	IX4
AWT-10532	4.5-10.5	17	21	4.3/4.5	+15	1.00	+23	2.0	2.0	120	IC2
AWT-10533	4.5-10.5	26	31	4.2/4.5	+15	1.00	+23	2.0	2.0	160	IC4
AWT-10534	4.5-10.5	34	41	4.2/4.5	+15	1.25	+23	2.0	2.0	210	IC4
AWT-10535	4.5-10.5	43	51	4.2/4.5	+15	1.50	+23	2.0	2.0	250	IC6
AWT-10552	4.5-10.5	15	20	5.5/6.0	+20	1.00	+28	2.0	2.0	275	IC2
AWT-10553	4.5-10.5	24	30	4.8/5.0	+20	1.25	+28	2.0	2.0	320	IC4
AWT-10554	4.5-10.5	32	40	4.2/4.5	+20	1.50	+28	2.0	2.0	360	IC4
AWT-10555	4.5-10.5	41	50	4.2/4.5	+20	1.75	+28	2.0	2.0	400	IC6

AWT Series — Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

AWT-11484	4.0-11.0	25.0	31	4.0	+7	2.00	+15	2.0	2.0	300	IX6
AWT-11485	4.0-11.0	32.0	39	4.0	+13	2.25	+21	2.0	2.0	365	IX6
AWT-10543	4.5-10.5	21.0	26	6.0	+15	1.75	+23	2.0	2.0	230	IC4
AWT-10544	4.5-10.5	28.0	34	6.0	+15	2.00	+23	2.0	2.0	250	IC6
AWT-10545	4.5-10.5	35.5	42	6.0	+15	2.25	+23	2.0	2.0	290	IC6
AWT-10563	4.5-10.5	19.0	24	7.0	+20	1.75	+28	2.0	2.0	375	IC4
AWT-10564	4.5-10.5	27.0	34	6.5	+20	2.00	+28	2.0	2.0	450	IC6
AWT-10565	4.5-10.5	33.0	41	6.0	+20	2.25	+28	2.0	2.0	475	IC6

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AFT—Avanpak Series Amplifiers, Connectorized or Stripline Compatible

AMT—High Performance and Temperature Compensated Connectorized Amplifier Series

AFT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Typical Gain (dB)	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Typical (mA)	Case Type
AFT-12631	6-12	7.5	8.0 Typ.	6.0/6.5	+10	0.7	+20	2.0	2.0	75 Typ.	AX2
AFT-12632	6-12	15.0	16.0 Typ.	5.7/6.0	+10	1.0	+20	2.0	2.0	150 Typ.	AX2
AFT-12633	6-12	22.5	24.0 Typ.	4.2/4.5	+14	1.0	+24	2.0	2.0	175 Typ.	AX4
AFT-12634	6-12	30.5	32.0 Typ.	4.2/4.5	+14	1.5	+24	2.0	2.0	225 Typ.	AX4
AFT-12635	6-12	38.0	40.0 Typ.	4.2/4.5	+14	2.0	+24	2.0	2.0	275 Typ.	AX6
AFT-12661	6-12	5.0	5.5 Typ.	7.5/8.0	+20	0.7	+29	2.0	2.0	175 Typ.	AX2
AFT-12662	6-12	13.0	14.0 Typ.	6.0/6.5	+20	1.0	+29	2.0	2.0	250 Typ.	AX2
AFT-12663	6-12	21.0	22.0 Typ.	5.0/5.5	+20	1.0	+29	2.0	2.0	300 Typ.	AX4
AFT-12664	6-12	28.0	29.0 Typ.	4.5/5.0	+20	1.5	+29	2.0	2.0	350 Typ.	AX4
AFT-12665	6-12	36.5	38.0 Typ.	4.5/5.0	+20	2.0	+29	2.0	2.0	400 Typ.	AX6

AMT Series — Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Maximum	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
AMT-12064	6-12	21	29	7.7	+20	1.5	+28	2.0	2.0	520	IX6
AMT-12065	6-12	32	40	5.0	+20	1.5	+28	2.0	2.0	460	IX6
AMT-12066	6-12	37	45	4.5	+20	2.0	+28	2.0	2.0	520	IX8

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AMT —High Performance and Temperature Compensated Connectorized Amplifier Series

AMT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
NEW AMT-12711	7-12.4	10	13	2.2/2.3	+9	0.5	+17	2.0	2.0	85	IX2
NEW AMT-12713	7-12.4	30	35	2.2/2.3	+15	1.0	+23	2.0	2.0	225	IX4
NEW AMT-12714	7-12.4	37	44	2.2/2.3	+20	1.5	+28	2.0	2.0	400	IX4
AMT-12432	7-12.4	17	21	3.9/4.5	+15	1.0	+23	2.0	2.0	140	IX2
AMT-12433	7-12.4	25	31	3.9/4.5	+15	1.0	+23	2.0	2.0	210	IX4
AMT-12434	7-12.4	31	39	3.7/4.0	+15	1.0	+23	2.0	2.0	230	IX4
AMT-12435	7-12.4	38	45	3.7/4.0	+15	1.5	+23	2.0	2.0	290	IX6
AMT-12436	7-12.4	47	55	3.7/4.0	+15	1.5	+23	2.0	2.0	350	IX6
AMT-12453	7-12.4	23	29	4.5/5.0	+20	1.0	+28	2.0	2.0	330	IX4
AMT-12454	7-12.4	32	40	3.9/4.5	+20	1.0	+28	2.0	2.0	390	IX4
AMT-12455	7-12.4	36	44	3.8/4.0	+20	1.5	+28	2.0	2.0	400	IX6
AMT-12456	7-12.4	45	53	3.8/4.0	+20	1.5	+28	2.0	2.0	450	IX6

AMT Series — Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

AMT-12483	7-12.4	18	24	—/4.9	+13	1.0	+21	2.0	2.0	230	IX4
AMT-12484	7-12.4	25	33	—/5.2	+15	1.5	+23	2.0	2.0	300	IX6
AMT-12485	7-12.4	32	41	—/4.7	+15	1.5	+23	2.0	2.0	330	IX6
AMT-12486	7-12.4	38	47	—/4.4	+15	2.0	+23	2.0	2.0	370	IX8
AMT-12487	7-12.4	45	55	—/4.2	+15	2.5	+23	2.0	2.0	420	IX8
AMT-12443	7-12.4	20	26	—/5.7	+13	1.0	+21	2.0	2.0	230	IX4
AMT-12444	7-12.4	27	35	—/6.0	+15	1.5	+23	2.0	2.0	300	IX6
AMT-12445	7-12.4	31	40	—/5.5	+15	1.5	+23	2.0	2.0	320	IX6
AMT-12446	7-12.4	36	45	—/5.2	+15	2.0	+23	2.0	2.0	350	IX8
AMT-12447	7-12.4	44	54	—/5.0	+15	2.5	+23	2.0	2.0	410	IX8
AMT-12464	7-12.4	21	29	—/6.7	+20	1.5	+28	2.0	2.0	420	IX6
AMT-12465	7-12.4	30	38	—/6.0	+20	1.5	+28	2.0	2.0	460	IX6
AMT-12466	7-12.4	36	45	—/5.6	+20	2.0	+28	2.0	2.0	640	IX8

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AWT —High Performance and Temperature Compensated Connectorized Amplifier Series

AWT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
AWT-13531	5-13	6	9	2.6/3.2	+10	0.75	+18	2.0	2.0	65	IX2
AWT-13532	5-13	13	17	3.1/3.5	+10	1.0	+18	2.0	2.0	130	IX2
AWT-13533	5-13	20	26	3.1/3.5	+15	1.25	+23	2.0	2.0	185	IX4
AWT-13534	5-13	28	36	3.1/3.5	+15	1.5	+23	2.0	2.0	245	IX4
AWT-13032	5-13	17	21	4.3/4.5	+15	1.0	+23	2.0	2.0	140	IX2
AWT-13033	5-13	25	30	4.3/4.5	+15	1.0	+23	2.0	2.0	200	IX4
AWT-13034	5-13	33	40	4.3/4.5	+15	1.0	+23	2.0	2.0	260	IX4
AWT-13035	5-13	41	49	4.3/4.5	+15	1.5	+23	2.0	2.0	320	IX6
AWT-13036	5-13	49	57	4.3/4.5	+15	1.5	+23	2.0	2.0	380	IX6

AWT Series — Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

AWT-13083	5-13	20	25	—/5.2	+13	1.5	+21	2.0	2.0	220	IX4
AWT-13084	5-13	26	32	—/5.0	+13	1.5	+21	2.0	2.0	280	IX6
AWT-13085	5-13	33	41	—/5.0	+15	2.0	+23	2.0	2.0	340	IX6
AWT-13086	5-13	40	48	—/5.0	+15	2.5	+23	2.0	2.0	400	IX8
AWT-13043	5-13	20	25	—/6.0	+13	1.5	+21	2.0	2.0	220	IX4
AWT-13044	5-13	27	33	—/6.0	+15	1.5	+23	2.0	2.0	280	IX6
AWT-13045	5-13	34	42	—/6.0	+15	2.0	+23	2.0	2.0	340	IX6
AWT-13046	5-13	41	49	—/6.0	+15	2.5	+23	2.0	2.0	400	IX8

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AFT—Avanpak Series Amplifiers, Connectorized or Stripline Compatible

AFT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Typical Gain (dB)	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Typical (mA)	Case Type
AFT-18631	6-18	7.0	7.5 Typ.	6.4/6.7	+10	1.0	+20	2.0	2.0	75 Typ.	AX2
AFT-18632	6-18	13.0	14.0 Typ.	6.5/7.0	+10	1.0	+20	2.0	2.0	125 Typ.	AX2
AFT-18633	6-18	18.5	20.0 Typ.	6.5/7.0	+10	1.0	+20	2.0	2.0	175 Typ.	AX4
AFT-18634	6-18	24.5	26.0 Typ.	6.5/7.0	+10	1.5	+20	2.0	2.0	250 Typ.	AX4
AFT-18635	6-18	30.0	32.0 Typ.	6.5/7.0	+10	2.0	+20	2.0	2.0	300 Typ.	AX6
AFT-18651	6-18	5.0	6.0 Typ.	7.0/7.3	+15	1.0	+25	2.0	2.0	100 Typ.	AX2
AFT-18652	6-18	11.0	12.0 Typ.	7.0/7.3	+15	1.0	+25	2.0	2.0	165 Typ.	AX2
AFT-18653	6-18	18.5	20.0 Typ.	6.6/7.1	+15	1.0	+25	2.0	2.0	225 Typ.	AX4
AFT-18654	6-18	24.5	26.0 Typ.	6.6/7.1	+15	1.5	+25	2.0	2.0	275 Typ.	AX4
AFT-18655	6-18	32.0	34.0 Typ.	6.6/7.1	+15	2.0	+25	2.0	2.0	325 Typ.	AX6
AFT-18662	6-18	9.5	10.5 Typ.	8.7/9.2	+20	1.0	+29	2.0	2.0	325 Typ.	AX2
AFT-18663	6-18	15.0	16.5 Typ.	8.2/8.7	+20	1.0	+29	2.0	2.0	360 Typ.	AX4
AFT-18664	6-18	23.0	24.5 Typ.	6.6/7.1	+20	1.5	+29	2.0	2.0	425 Typ.	AX4
AFT-18665	6-18	30.5	32.5 Typ.	6.6/7.1	+20	2.0	+29	2.0	2.0	475 Typ.	AX6

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AWT — High Performance and Temperature Compensated Connectorized Amplifier Series

AWT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out	Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
NEW AWT-18613	6-18	25	31	2.5/2.8	+8	1.0	+16	2.0 2.0	150	IX4
NEW AWT-18614	6-18	31	37	2.5/2.8	+14	1.5	+22	2.0 2.0	200	IX4
NEW AWT-18615	6-18	37	43	2.5/2.8	+17	1.5	+25	2.0 2.0	275	IX6
NEW AWT-18616	6-18	42	49	2.5/2.8	+20	2.0	+28	2.0 2.0	450	IX6
AWT-18632	6-18	14	20	5.2/5.5	+13	1.0	+21	2.0 2.0	140	IX2
AWT-18633	6-18	20	26	5.1/5.5	+13	1.0	+21	2.0 2.0	200	IX4
AWT-18634	6-18	26	32	5.1/5.5	+15	1.0	+23	2.0 2.0	260	IX4
AWT-18635	6-18	32	38	5.1/5.5	+15	1.5	+23	2.0 2.0	320	IX6
AWT-18636	6-18	38	44	5.1/5.5	+15	1.5	+23	2.0 2.0	380	IX6
AWT-18637	6-18	44	50	5.1/5.5	+15	2.0	+23	2.0 2.0	440	IX8
AWT-18654	6-18	24	30	5.5/6.0	+20	1.0	+28	2.0 2.0	370	IX4
AWT-18655	6-18	30	36	5.2/5.5	+20	1.5	+28	2.0 2.0	430	IX6
AWT-18656	6-18	36	42	5.2/5.5	+20	1.5	+28	2.0 2.0	490	IX6
AWT-18657	6-18	42	50	5.2/5.5	+20	2.0	+28	2.0 2.0	560	IX8

AWT Series — Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

AWT-18685	6-18	26	32	5.3/5.5	+10	2.5	+18	2.0 2.0	350	IX6
AWT-18686	6-18	30	38	4.8/5.0	+10	2.5	+18	2.0 2.0	410	IX8
AWT-18688	6-18	40	48	4.8/5.0	+15	3.0	+23	2.0 2.0	520	IX10
AWT-18695	6-18	26	32	5.8/6.0	+15	2.5	+23	2.0 2.0	350	IX6
AWT-18696	6-18	30	36	5.8/6.0	+18	2.5	+26	2.0 2.0	510	IX8
AWT-18698	6-18	40	48	5.3/5.5	+20	3.0	+28	2.0 2.0	630	IX10
AWT-18644	6-18	20	25	6.7/7.0	+12	2.0	+20	2.0 2.0	290	IX6
AWT-18645	6-18	25	30	6.7/7.0	+15	2.5	+23	2.0 2.0	350	IX6
AWT-18646	6-18	30	36	6.3/6.5	+15	2.5	+23	2.0 2.0	440	IX8
AWT-18647	6-18	36	44	6.3/6.5	+18	3.0	+26	2.0 2.0	510	IX8
AWT-18648	6-18	42	50	6.3/6.5	+18	3.0	+26	2.0 2.0	570	IX10
AWT-18666	6-18	28	36	7.0/7.5	+20	2.5	+28	2.0 2.0	520	IX8
AWT-18667	6-18	36	44	6.3/6.5	+20	3.0	+28	2.0 2.0	600	IX8

Notes:

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.
2. Maximum RF input power for AWT-1861X Series is +17 dBm (CW), +27 dBm pulse, 1µs 1% D.C.

AFT—Avanpak Series Amplifiers, Connectorized or Stripline Compatible

AFT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Typical Gain (dB)	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out	Input Power Current @ +12 V ¹ Typical (mA)	Case Type
AFT-18831	8-18	7.0	7.5 Typ.	6.4/6.7	+10	1.0	+20	2.0 2.0	75 Typ.	AX2
AFT-18832	8-18	13.0	14.0 Typ.	6.5/7.0	+10	1.0	+20	2.0 2.0	125 Typ.	AX2
AFT-18833	8-18	18.5	20.0 Typ.	6.5/7.0	+10	1.0	+20	2.0 2.0	175 Typ.	AX4
AFT-18834	8-18	24.5	26.0 Typ.	6.5/7.0	+10	1.5	+20	2.0 2.0	250 Typ.	AX4
AFT-18835	8-18	30.0	32.0 Typ.	6.5/7.0	+10	2.0	+20	2.0 2.0	300 Typ.	AX6
AFT-18851	8-18	5.0	5.5 Typ.	7.0/7.3	+15	1.0	+25	2.0 2.0	100 Typ.	AX2
AFT-18852	8-18	11.0	12.0 Typ.	7.0/7.3	+15	1.0	+25	2.0 2.0	165 Typ.	AX2
AFT-18853	8-18	18.5	20.0 Typ.	6.6/7.1	+15	1.0	+25	2.0 2.0	225 Typ.	AX4
AFT-18854	8-18	24.5	26.0 Typ.	6.6/7.1	+15	1.5	+25	2.0 2.0	275 Typ.	AX4
AFT-18855	8-18	32.0	34.0 Typ.	6.6/7.1	+15	2.0	+25	2.0 2.0	325 Typ.	AX6
AFT-18862	8-18	9.5	10.5 Typ.	8.7/9.2	+20	1.0	+29	2.0 2.0	325 Typ.	AX2
AFT-18863	8-18	15.0	16.5 Typ.	8.2/8.7	+20	1.0	+29	2.0 2.0	360 Typ.	AX4
AFT-18864	8-18	23.0	24.5 Typ.	6.6/7.1	+20	1.5	+29	2.0 2.0	425 Typ.	AX4
AFT-18865	8-18	30.5	32.5 Typ.	6.6/7.1	+20	2.0	+29	2.0 2.0	475 Typ.	AX6

AWT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out	Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
AWT-18032	8-18	14	20	5.5/6.5 ²	+13	1.0	+21	2.0 2.0	140	IX2
AWT-18033	8-18	20	26	5.5/6.5 ²	+13	1.0	+21	2.0 2.0	190	IX4
AWT-18034	8-18	26	32	5.5/6.5 ²	+15	1.0	+23	2.0 2.0	260	IX4
AWT-18035	8-18	32	38	5.5/6.5 ²	+15	1.5	+23	2.0 2.0	310	IX6
AWT-18036	8-18	38	44	5.5/6.5 ²	+15	1.5	+23	2.0 2.0	370	IX6
AWT-18037	8-18	44	50	5.5/6.5 ²	+15	2.0	+23	2.0 2.0	430	IX8
AWT-18054	8-18	24	30	5.5/7.0	+20	1.0	+28	2.0 2.0	370	IX4
AWT-18055	8-18	30	36	5.5/7.0	+20	1.5	+28	2.0 2.0	420	IX6
AWT-18056	8-18	36	42	5.5/7.0	+20	1.5	+28	2.0 2.0	480	IX6
AWT-18057	8-18	42	50	5.5/7.0	+20	2.0	+28	2.0 2.0	520	IX8

AWT Series — Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

AWT-18044	8-18	20	25	—/7.5	+12	2.0	+20	2.0 2.0	290	IX6
AWT-18045	8-18	25	30	—/7.5	+15	2.5	+23	2.0 2.0	350	IX6
AWT-18046	8-18	30	36	—/7.5	+15	2.5	+23	2.0 2.0	430	IX8
AWT-18047	8-18	36	44	—/7.5	+18	3.0	+26	2.0 2.0	500	IX8
AWT-18048	8-18	42	50	—/7.5	+18	3.0	+26	2.0 2.0	575	IX10
AWT-18066	8-18	28	36	—/8.5	+20	2.5	+28	2.0 2.0	520	IX8
AWT-18067	8-18	36	44	—/7.5	+20	3.0	+28	2.0 2.0	600	IX8

Notes

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.
2. 4.0 dB noise figure versions are available on special request.

AMT — High Performance Connectorized Amplifier Series

AMT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
AMT-18032	12-18	14	20	5.5/6.5 ²	+13 ³	1.0	+21	2.0	2.0	140	IX2
AMT-18033	12-18	20	26	5.0/6.5 ²	+13 ³	1.0	+21	2.0	2.0	190	IX4
AMT-18034	12-18	26	32	5.0/6.5 ²	+15 ³	1.0	+23	2.0	2.0	260	IX4
AMT-18035	12-18	32	38	5.0/6.5 ²	+15 ³	1.5	+23	2.0	2.0	310	IX6
AMT-18036	12-18	38	44	5.0/6.5 ²	+15 ³	1.5	+23	2.0	2.0	360	IX6
AMT-18037	12-18	44	50	5.0/6.5 ²	+15 ³	2.0	+23	2.0	2.0	410	IX8

AMT Series — Temperature Compensated

Guaranteed Specifications @ -54° to +100°C Case Temperature

AMT-18044	12-18	20	25	—/7.5	+12	2.0	+20	2.0	2.0	290	IX6
AMT-18045	12-18	25	30	—/7.5	+15	2.5	+23	2.0	2.0	350	IX6
AMT-18046	12-18	30	36	—/7.5	+15	2.5	+23	2.0	2.0	440	IX8
AMT-18047	12-18	36	44	—/7.5	+18	3.0	+26	2.0	2.0	410	IX8
AMT-18048	12-18	42	50	—/7.5	+18	3.0	+26	2.0	2.0	570	IX10

Notes

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.
2. 4.0 dB noise figure versions are available on special request.
3. +20 dBm at 1 dB compression versions are available on special request.

AFT, AMT and AWT Series: Wideband Small Signal Amplifiers

1.0 to 20.0 GHz
Frequency Range

AFT — Avanpak Series Amplifiers, Connectorized or Stripline Compatible
AWT—High Performance Connectorized Amplifier Series

AFT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Maximum	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Typical (mA)	Case Type
AFT-18232	2-18	9.0	17	10.0	+10	2.0	+18	2.2	2.2	225	AX2
AFT-18234	2-18	18.0	28	10.0	+10	4.0	+18	2.2	2.2	425	AX2

AWT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Maximum	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
NEW AWT-12012	0.5-12	27.0	32	5.5/6.5	+10	1.5	+18	2.3	2.0	325	IX2
NEW AWT-12013	0.5-12	41.0	49	5.5/6.5	+10	2.0	+18	2.3	2.0	475	IX4
AWT-19133	1-19	14.5	19	10.5	+10	2.0	+18	2.2	2.2	275	IX4
AWT-19134	1-19	20.0	27	10.5	+10	2.5	+18	2.2	2.2	365	IX4
AWT-19135	1-19	25.0	34	10.5	+10	3.0	+18	2.2	2.2	455	IX6
AWT-18233	2-18	14.5	19	10.0	+10	1.5	+18	2.2	2.2	275	IX4
AWT-18234	2-18	20.0	27	10.0	+10	2.0	+18	2.2	2.2	365	IX4
AWT-18235	2-18	25.0	34	10.0	+10	2.5	+18	2.2	2.2	455	IX6
AWT-18236	2-18	30.0	40	10.0	+10	3.0	+18	2.2	2.2	545	IX6
NEW AWT-18212	2-18	29.0	34	5.8/6.5	+10	1.5	+18	2.2	2.2	250	IX2
NEW AWT-18213	2-18	42.0	50	5.8/6.5	+10	2.0	+18	2.2	2.2	350	IX4
AWT-18252	2-18	10.0	15	10.0	+20	1.0	+28	2.2	2.2	375	IX2
AWT-18253	2-18	15.0	22	10.0	+20	1.5	+28	2.2	2.2	550	IX4
AWT-18254	2-18	20.0	28	10.0	+20	2.0	+28	2.2	2.2	650	IX4
AWT-20233	2-20	14.5	19	11.0	+10	1.5	+18	2.2	2.2	275	IX4
AWT-20234	2-20	20.0	27	11.0	+10	2.0	+18	2.2	2.2	365	IX4
AWT-20235	2-20	25.0	34	11.0	+10	2.5	+18	2.2	2.2	455	IX6
AWT-20236	2-20	30.0	40	11.0	+10	3.0	+18	2.2	2.2	545	IX6

AWT Series — Temperature Compensated

Guaranteed Specifications @ -54°C to +100°C Case Temperature

AWT-18244	2-18	18	26	11.0	+9	3.0	+17	2.2	2.2	425	IX4
AWT-18245	2-18	22	31	11.0	+9	3.5	+17	2.2	2.2	510	IX6
AWT-18246	2-18	26	36	11.0	+9	4.0	+17	2.2	2.2	600	IX6

Note

1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

AMT — High Performance Connectorized Amplifier Series

AWT — High Performance Connectorized Amplifier Series

AMT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Gain (dB) Maximum	Noise Figure (dB) Maximum	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out		Input Power Current @ +12 V ¹ Maximum (mA)	Case Type
AMT-20032	12-20	10	14	7.0	+17.0	1.0	+25	2.0	2.0	175	IX2
AMT-20033	12-20	15	20	7.0	+17.0	1.0	+25	2.0	2.0	250	IX4
AMT-20034	12-20	21	27	7.0	+17.0	1.5	+25	2.0	2.0	325	IX4
AMT-20035	12-20	26	33	7.0	+17.0	1.5	+25	2.0	2.0	400	IX6
AMT-20036	12-20	32	40	7.0	+17.0	2.0	+25	2.0	2.0	475	IX6

AWT Series

Guaranteed Specifications @ 25°C Case Temperature

AWT-20832	8-20	10	14	8.0	+16.0	1.0	+24	2.0	2.0	175	IX2
AWT-20833	8-20	15	20	8.0	+16.0	1.0	+24	2.0	2.0	250	IX4
AWT-20834	8-20	21	27	8.0	+16.0	1.5	+24	2.0	2.0	325	IX4
AWT-20835	8-20	26	33	8.0	+16.0	1.5	+24	2.0	2.0	400	IX6
AWT-20836	8-20	32	40	8.0	+16.0	2.0	+24	2.0	2.0	485	IX6

Note

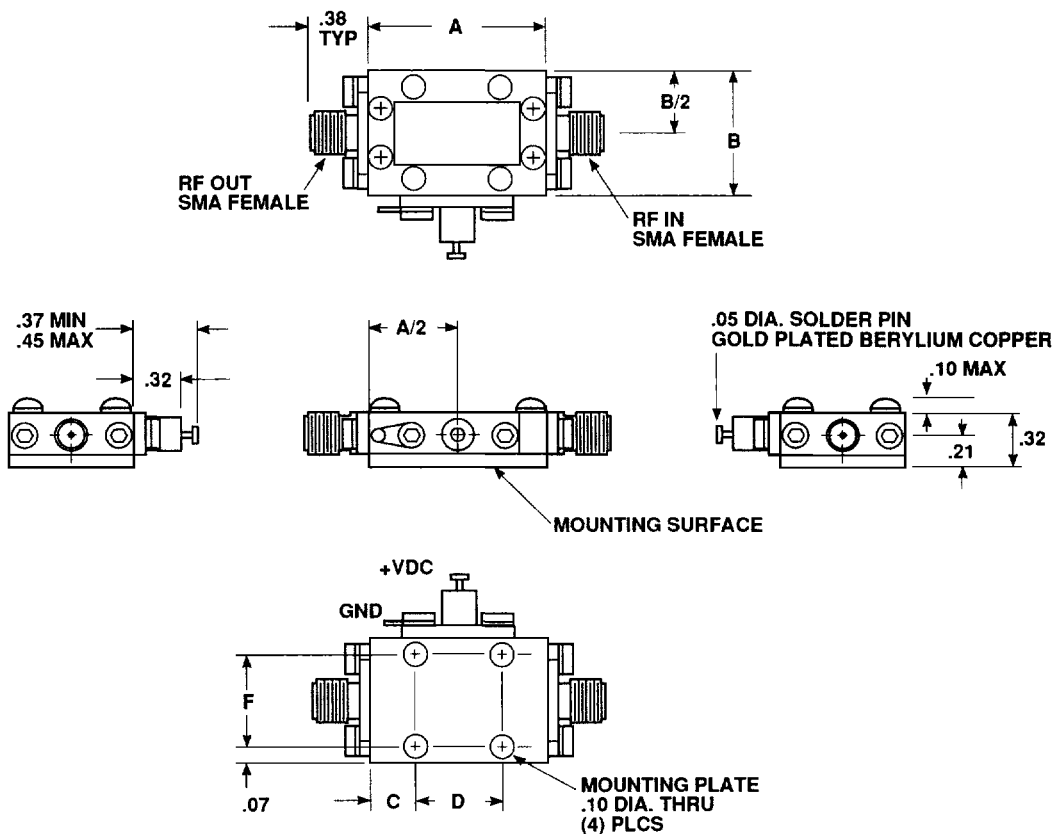
1. Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.

**AFT, AMT and AWT Series:
Wideband Small Signal Amplifiers**

**Case Drawings
AC_, AS_, and AX_**

AFT Series: Avanpak™ SMA Package

Female input and output connectors are the standard. If any other connectors are desired, please add the appropriate suffix, as shown in the table below, to the AFT model number.



CASE	DIMENSION					WEIGHT MAX GRAMS
	A	B	C	D	F	
AX2	1.364	.664	.31	.750	.524	35
AC2	1.500	.764	.34	.826	.624	40
AS2	1.500	.862	.34	.826	.722	42
AX4	1.850	.664	.31	1.236	.524	45
AC4	2.170	.764	.672	.826	.624	55
AS4	2.170	.862	.672	.826	.722	57
AX6	2.336	.664	.307	1.722	.524	53

NOTES (UNLESS OTHERWISE SPECIFIED):

1. DIMENSIONS ARE SPECIFIED IN INCHES
2. TOLERANCES: .XX ± .02
.XXX ± .010

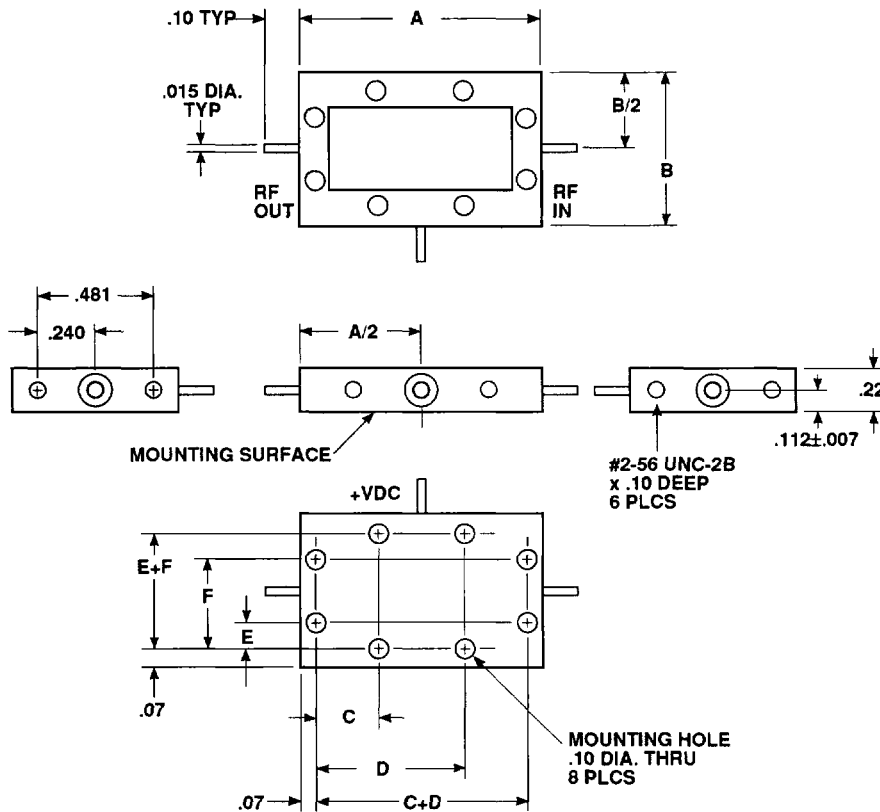
CONNECTOR OPTION TABLE

	SUFFIX	INPUT	OUTPUT
STANDARD	-10F	FEM	FEM
	-30F	MALE	MALE
SPECIAL	-40F	MALE	FEM
ORDER	-50F	FEM	MALE

Case Drawings AC_, AS_, and AX_

AFT Series: Avanpak™ PIN Package Dimensions - connectors and baseplate removed.

All Avanpaks are supplied with connectors installed; however, they may be removed by the user. If DC filtercon is removed, the user may need to provide external filtering.



CASE	DIMENSION						WEIGHT MAX GRAMS
	A	B	C	D	E	F	
AX2	1.364	.664	.237	.987	.137	.387	26
AC2	1.500	.764	.267	1.093	.187	.437	31
AS2	1.500	.862	.267	1.093	.236	.486	33
AX4	1.850	.664	.237	1.473	.137	.387	36
AC4	2.170	.764	.602	1.428	.187	.437	46
AS4	2.170	.862	.602	1.428	.236	.486	48
AX6	2.336	.664	.237	1.959	.137	.387	44

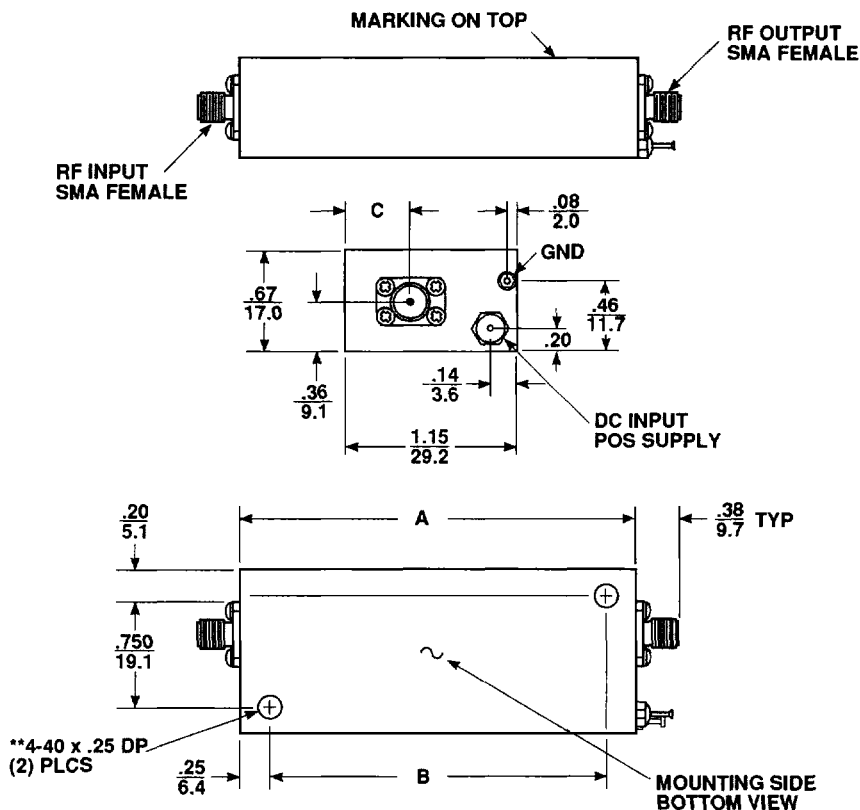
NOTES (UNLESS OTHERWISE SPECIFIED):

1. DIMENSIONS ARE SPECIFIED IN INCHES
2. TOLERANCES: .XX ± .01
.XXX ± .005
3. MATERIAL:
BODY AND RF CONNECTORS — 303 STAINLESS STEEL
MOUNTING SPACER — ALUMINUM ALLOY
FILTER BODY — NICKEL PLATED BRASS

AFT, AMT and AWT Series:
Wideband Small Signal Amplifiers

Case Drawings
IC_, IS_, and IX_

AMT/AWT Series



CASE	DIMENSION						WEIGHT TYPICAL	
	A		B		C			
	IN	MM	IN	MM	IN	MM	OZ	GMS
IS2	1.417	35.9	.917	23.2	.375	9.5	2	47
IS4	2.083	52.9	1.583	40.2	.375	9.5	3	68
IS6	2.750	69.8	2.250	57.1	.375	9.5	4	90
IC2	1.417	35.9	.917	23.2	.465	11.8	2	47
IC4	2.083	52.9	1.583	40.2	.465	11.8	3	68
IC6	2.750	69.8	2.250	57.1	.465	11.8	4	90
IX2	1.250	31.8	.750	19.1	.510	13.0	2	47
IX4	1.750	44.4	1.250	31.7	.510	13.0	2	58
IX6	2.250	57.1	1.750	44.4	.510	13.0	3	78
IX8	2.750	69.8	2.250	57.1	.510	13.0	4	92
IX10	3.250	82.5	2.750	69.8	.510	13.0	4	108

NOTES (UNLESS OTHERWISE SPECIFIED):

1. DIMENSIONS ARE SPECIFIED IN $\frac{\text{INCHES}}{\text{MM}}$
2. TOLERANCES: .XX $\pm$.02
.XXX $\pm$.010

ALL TOLERANCES BEFORE PAINT AND/OR LABELING

**AVAILABLE WITH METRIC THREAD M3 ON REQUEST.
 NO THREADS FIRST .062"

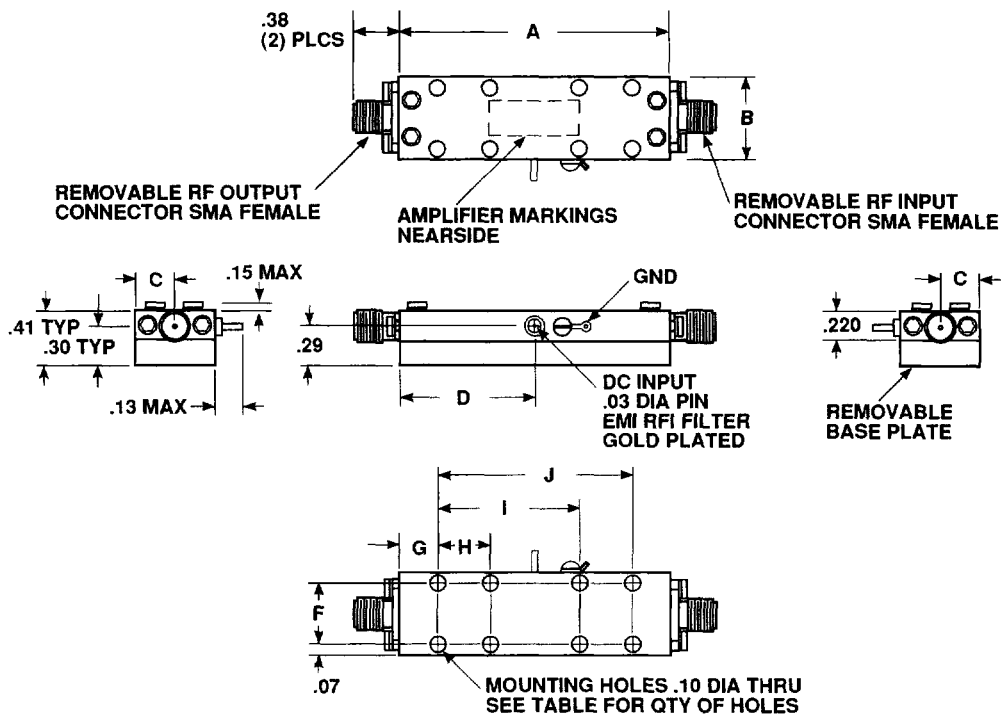
CONNECTOR OPTION TABLE

	SUFFIX	INPUT	OUTPUT
STANDARD	NONE	FEM	FEM
SPECIAL ORDER	-30I	MALE	MALE
	-40I	MALE	FEM
	-50I	FEM	MALE

Case Drawings

MAC_, MAS_, and MAX_

SELECTED AMPLIFIERS AVAILABLE IN THE I-SERIES CASE SHOWN ON THE PREVIOUS PAGE ARE ALSO AVAILABLE IN THIS MA-SERIES CASE. INTERNAL DC FILTERING IS PROVIDED ON THE DC TERMINAL. CONTACT AVANTEK APPLICATIONS ENGINEERING FOR FURTHER INFORMATION.



CASE	DIMENSION									QTY OF HOLES
	A	B	C	D	F	G	H	I	J	
MAX2	1.364	.664	.332	.68	.524	.31	N/A	N/A	.750	4
MAC2	1.500	.764	.382	.75	.624	.34	N/A	N/A	.826	4
MAS2	1.500	.862	.431	.75	.722	.34	N/A	N/A	.826	4
MAX3	1.607	.664	.332	.80	.524	.31	N/A	N/A	.992	4
MAC3	1.833	.764	.382	.75	.624	.34	N/A	N/A	1.159	4
MAS3	1.833	.862	.431	.75	.722	.34	N/A	N/A	1.159	4
MAX4	1.850	.664	.332	.92	.524	.31	N/A	N/A	1.238	4
MAC4	2.170	.764	.382	1.08	.624	.67	N/A	N/A	.826	4
MAS4	2.170	.862	.431	1.08	.722	.67	N/A	N/A	.826	4
MAX5	2.093	.664	.332	1.04	.524	.31	N/A	N/A	1.478	4
MAC5	2.503	.764	.382	1.08	.624	.67	N/A	N/A	1.159	4
MAS5	2.503	.862	.431	1.08	.722	.67	N/A	N/A	1.159	4
MAX6	2.336	.664	.332	1.17	.524	.31	.483	1.239	1.722	8
MAC6	2.836	.764	.382	1.41	.624	.67	N/A	N/A	1.491	4
MAS6	2.836	.862	.431	1.41	.722	.67	N/A	N/A	1.491	4
MAX7	2.579	.664	.332	1.29	.524	.31	.483	1.478	1.965	8
MAX8	2.822	.664	.332	1.41	.524	.31	.483	1.722	2.207	8

NOTES (UNLESS OTHERWISE SPECIFIED):

- DIMENSIONS ARE SPECIFIED IN INCHES
 - TOLERANCES: .XX ± .02
.XXX ± .010
- ALL TOLERANCES BEFORE PAINT AND/OR LABELING