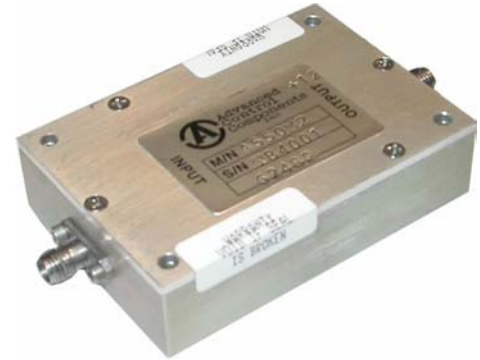




WIDE BAND AMPLIFIERS

Advanced Control Components designs and manufactures a wide variety of high-performance, multi-octave wide band amplifiers from RF to millimeter-wave frequencies. The tables below list a small portion of the units we have designed. Most parameters such as bandwidth, gain, noise figure, compression point etc. can be tailored to your requirements. Contact the factory to discuss any modifications or additions of special functions such as gain control, power monitoring, temperature compensation, etc.



All models are available with hermetic seal and high-rel screening for mil and spaced-based applications.

Part Number	Frequency Range (MHz)	Gain (dB min)	Flatness (+/-dB) (max)	1dB Compression (+dBm min)	Noise Figure (dB max)	IP3 (+dBm typ)	Supply Voltage (VDC)	Current (mA max)	Standard Case Style
W20ATC	0.08 - 20	53	0.5	5	1.2	15	15	25	S019
W20T-1	1 - 25	20	1.0	5	1.5	15	15	40	S025
W30ETG	0.01 - 30	50	0.75	13	5.0	23	15	20	S019
W30C	0.1 - 30	20	0.55	8	1.5	18	15	25	S014
W40B	1 - 40	15	0.5	22	4.5	32	15	100	S025
W40A	1 - 40	20	0.5	3	1.2	13	15	25	S025
W40F	1 - 40	42	0.5	15	1.2	25	15	80	S025
W40D	1 - 40	60	0.5	12	1.2	22	15	65	S025
W50ETC	0.01 - 50	24	0.5	23	5.3	33	15	125	S020
W50ETC-4	0.01 - 50	40	0.5	14	2.0	24	15	50	S020
W50ATC	0.01 - 50	50	0.5	5	1.3	15	15	25	S019
W60B	1 - 60	20	0.5	10	2.0	20	15	40	S025
W60A	1 - 60	40	0.5	10	1.1	20	15	45	S025
AP60M30	5 - 60	40	1.0	30	1.5	40	20	550	P008
W100H	2 - 100	20	0.5	10	3.0	20	15	40	S025
W110HH	5 - 110	30	0.5	7	1.2	17	15	30	S025
W110F	5 - 110	55	0.5	15	1.1	25	15	80	S025
W150D-1	10 - 150	50	0.5	5	1.7	15	15	40	S019
W200GM	0.001 - 200	33	1.0	5	1.4	15	15	45	S025
W200B-3	0.1 - 200	45	0.5	15	1.3	25	15	60	S019
W250CM-1	0.05 - 250	65	0.75	0	1.5	10	15	30	S024
W250C	0.5 - 250	45	0.5	15	1.5	25	15	80	S025
W250D	1 - 250	30	0.5	5	1.5	15	12	15	S025
W250B	5 - 250	30	0.5	3	1.5	13	15	15	S025
W250G	5 - 250	43	0.5	25	1.5	35	20	350	S025
AP300M05	1 - 300	30	0.5	5	1.5	15	15	25	S026
W300C	10 - 300	28	0.5	0	1.5	10	15	25	S025
W350C	10 - 350	40	0.2	16	1.4	26	15	40	S025
W400H	350 - 450	56	0.3	22	2.0	32	15	100	S025
W500K	0.001 - 500	30	1.0	5	2.2	15	15	25	S019
W500GM	0.1 - 500	30	0.75	10	3.0	20	15	30	S025
W500F-8	1 - 500	33	0.5	23	3.0	33	15	120	S018
W500A	5 - 500	20	0.5	3	1.8	13	15	30	S025
W500E	5 - 500	30	0.5	0	1.1	10	15	20	S025
W500B	5 - 500	30	0.5	5	1.3	15	15	20	S025
W500B-3	5 - 500	30	0.75	10	2.4	20	15	20	S025
W500HH	5 - 500	33	0.5	5	1.4	15	15	30	S025
W500C	5 - 500	40	0.5	10	1.4	20	15	50	S025
W500EF	5 - 500	60	0.5	20	1.4	30	15	190	S022
ACAM7728	95 - 505	16	0.5	23	5.0	33	15	130	S019
W600	50 - 600	36	0.2	15	1.6	25	15	30	S025
W650	5 - 650	28	0.2	3	1.5	13	15	20	S025
ACAM7538	500 - 900	28	1.0	20	2.5	30	15	180	S016
W1G2M-3	0.01 - 1000	30	2.0	5	2.0	15	15	30	S019
W1GES	1 - 1000	20	0.5	3	1.8	13	15	20	S025
W1G2H	5 - 1000	30	0.5	5	1.3	15	15	40	S025
W10GZ	500 - 1000	30	0.5	16	3.0	26	15	80	S025
W12GE	5 - 1200	20	0.5	3	2.0	13	15	20	S025
W13GB3	1 - 1300	30	1.5	0	4.0	10	15	20	S025
W15GB1	50 - 1500	18	0.5	3	2.3	13	15	20	S025



Part Number	Frequency Range (MHz)	Gain (dB min)	Flatness (+/-dB) (max)	1dB Compression (+dBm min)	Noise Figure (dB max)	IP3 (+dBm typ)	Supply Voltage (VDC)	Current (mA max)	Standard Case Style
W15GB3	50 - 1500	30	0.5	5	2.0	15	15	35	S025
W15GB4	100 - 1500	40	0.5	3	2.2	13	15	35	S025
W16GA-2	1200 - 1600	35	0.5	2	2.5	12	15	40	S025
W18GB	10 - 1800	20	0.5	0	2.5	10	15	20	S025
W18GC	800 - 1800	45	0.5	0	3.5	10	10	60	S016
ACAM7726	1 - 2000	30	1.0	28	12	38	15	1000	S009
W2G10B	10 - 2000	32	1.0	0	3.5	10	15	30	S023
W2GA-5	500 - 2000	15	0.5	0	3.5	10	15	20	S025
W2GH	500 - 2000	22	1.0	5	3.0	15	15	30	S025
W2GB	1000 - 2000	23	0.5	10	4.0	20	15	35	S025

Notes:

- All specifications guaranteed at +25°C.
- Operating temperature range: -50°C to +70°C. Extended operating temperature range available.
- VSWR is specified at 2.0:1 maximum input and output at 50Ω. Typical performance is 1.7:1.
- All models can be optimized for different frequency ranges.
- Custom packaging is available for all models.
- Standard package finish: Chemical film per MIL-C-5541, Class C.
- RF connectors per MIL-PRF-39012 (SMA female standard)

ENVIRONMENTAL SPECIFICATIONS:

MIL-E-5400, MIL-STD-202, MIL-E-16400
 Operating Temp: -50°C to +70°C
 Storage Temp: -65°C to +125°C
 Humidity: MIL-STD-202F, M103, Cond B
 Shock: MIL-STD-202F, M213, Cond B
 Altitude: MIL-STD-202F, M105, Cond B
 Vibration: MIL-STD-202F, M204, Cond B
 Thermal Shock: MIL-STD-202F, M107, Cond A
 Temperature Cycle: MIL-STD-202F, M105C, Cond D

SCREENING :

Standard Screening:
 Internal Visual per MIL-STD-883, Method 2017
 Temperature Cycle: -65°C to +100°C, 10 cycles
Optional High-Rel Screening (Ref MIL-PRF-38534):
 Internal Visual per MIL-STD-883, Method 2017
 Stabilization Bake per MIL-STD-883, Method 1008
 Temperature Cycle per MIL-STD-883, Method 1010
 Constant Acceleration per MIL-STD-883, Method 2001
 Burn-in per MIL-STD-883, Method 1015
 Leak Test per MIL-STD-883, Method 1014
 External Visual per MIL-STD-883, Method 2009

Refer to Standard Amplifier Outline Drawing specification for mechanical details

OPTIONS:

- Custom frequency ranges available to 40GHz
- Alternate standard and custom packaging
- Available as open cards or drop-in modules
- Hermetic seal
- Integrated power supplies
- Multiple outputs
- Interstage access points
- Hi-rel screening
- Supply voltage options
- Voltage-controlled gain
- Temperature compensation
- Input and output limiting
- Integrated filters
- Unit-to-unit gain and phase matching
- Detected outputs
- Power monitoring

* Contact the factory for price and delivery or to discuss options and custom requirements

Advanced Control Components is your source for custom amplifiers and amplifier assemblies. With complete design and test capability to 40GHz, we have the resources to help develop and realize a new design, build to an existing specification or replace an obsolete component. From commercial to space qualified applications, we can help.

In addition to high performance amplifier design capability, Advanced Control Components produces custom amplifier-based multi-function assemblies to 40GHz. With our extensive expertise, we can integrate a wide variety of components and functions such as mixers, limiters, switches, attenuators, combiners/dividers, filters, detectors, etc. Additional capabilities include microprocessor control and monitoring, RF signal monitoring, and power supply conditioning. Contact the factory to discuss your design and application.