



ZHM 20-6000/10 MIL GRADE HIGH POWER AMPLIFIER 20 MHz TO 6 GHz



This is a medium power, super broadband RF amplifier that operates from 20 MHz to 6 GHz, ideal for broadband military platforms as well as commercial applications because it is robust and offers high power over an extremely large bandwidth with decent power added efficiency. It was designed for broad band jamming and communication systems platforms. It is packaged in a modular housing that is approximately 2.5" (width) by 6.4" (long) by 1.00" (height). This amplifier has a typical saturated output power of 5-10 watts at room temperature.

Noise figure at room temperature is 10.0 dB typical. It offers a typical gain of 50 dB with a typical gain flatness of ± 4.0 dB. The power and gain flatness across the band is very flat for the bandwidth. Input VSWR is 2.0:1 typical. This amplifier operates from -40C to +85C base plate temperature.

- Gallium Nitride Broadband Power Amplifier
- Operation from 20 MHz to 6.0 GHz min
- Small Signal Gain 50 dB typical
- 5-10 Watts PSat typical

Freq (MHz)	Small Signal Gain (dB)	Pout @ PSat (dBm)	Current @ PSat from a 28Vdc Supply (Amps)	2 nd Harmonic @ Pout=1.0Watts (dBc)	3 rd Harmonic @ Pout=1.0Watts (dBc)
20	48.0	40.1	1.6	-15.8	-25.0
50	51.2	39.9	1.9	-19.1	-27.0
100	50.7	40.2	2.2	-18.0	-25.8
200	49.4	40.7	2.6	-18.3	-26.0
400	48.8	40.6	2.7	-20.0	-25.8
600	49.3	40.7	2.6	-20.8	-23.6
800	48.6	40.6	2.7	-18.5	-26.5

1000	49.1	40.8	2.5	-19.5	-26.0
1250	48.0	40.7	2.6	-17.3	-26.3
1500	48.3	41.0	2.5	-23.1	-25.3
1750	47.1	40.7	2.5	-20.8	-28.1
2000	47.5	40.7	2.4	-22.0	-23.0
2250	46.3	40.0	2.3	-18.0	-25.8
2500	46.0	39.6	2.3	-15.6	-26.0
2750	44.7	39.2	2.4	-19.5	-26.0
3000	45.3	39.2	2.3	-16.2	-36.0
3250	45.6	38.4	2.0	-11.5	-30.0
3500	45.1	38.6	2.1	-15.3	-38.0
3750	43.8	39.4	2.2	-20.0	-46.0
4000	43.1	39.3	2.0	-18.6	-60.0
4500	42.8	38.7	2.2	-16.0	-50.0
5000	43.9	38.6	2.0	-23.0	-52.0
5500	41.2	38.8	2.0	-24.5	-43.0
6000	40.0	37.8	2.0	-46.0	-60.0

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