

5 Watts Class A 10 Watts Saturated RF Power for:

- Driving Ultrasonic Transducers
- Broadband Testing



Featuring:

- Instantaneous Bandwidth
- Compact Design
- Solid State Reliability

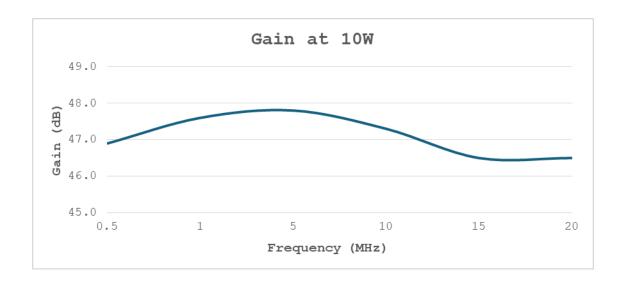




AL10W-LF AMPLIFIER MODULE

| AL10W Specifications* | | | | |
|-------------------------------------|---|--|--|--|
| Class of Operation: | Class A up to 5W Saturated at 10W | | | |
| Frequency Coverage: | 500 kHz – 20 MHz | | | |
| Rated Power: | 10 Watts into 50 Ω | | | |
| Power Gain: | 47 dB nominal | | | |
| Gain Flatness: | +/- 1.5 dB into 50Ω at 5W +/- 1.5 dB into 50Ω at 10W | | | |
| Input Power for Rated Output Power: | -7.5 dBm | | | |
| Input Impedance / VSWR: | 50 Ω / 2:1 maximum | | | |
| Output Load Impedance: | 50 Ω nominal | | | |
| Harmonic Level: | < -15 dBc at 5W Pout < -10 dBc at 10W Pout | | | |
| Third Order Intercept | 70 dB typical | | | |
| Mismatch Tolerance: | ∞:1 VSWR, can handle full reflection of rated power | | | |
| Stability: | Unconditional into any passive or reactive load | | | |
| Protection: | Reverse DC polarity protection | | | |
| DC Input: | 12.5 DC +/-5%, 3A max | | | |
| Cooling: | Requires forced air (Keep Q1 case temp below 80° C) | | | |
| Dimensions (H x W x D): | 1.5 x 3.25 x 3.25 inches 38 x 63.5 x 63.5 mm | | | |
| Weight: | 0.41 lbs. (0.19 kg) | | | |
| Connectors: | SMA | | | |
| RF Input Signal: | CW, AM, FM, SSB, Pulsed | | | |

AL10W-LF AMPLIFIER MODULE



Notes:

- Forced air cooling is required: keep Q1 case temperature below 80°C
- Built-in reverse DC polarity protection
- Average gain will drop ~1dB from linear operation → saturated power



| AL10W-LF — Performance into 50Ω | | | | |
|---------------------------------|--------|----------------|--------------|-------|
| Input Level | | Amplifier Gain | Output Power | |
| Vpp | dBm | dB | Watts | Vpp |
| 0.14 | -13.03 | 47 | 2.5 | 31.60 |
| 0.20 | -10.01 | 47 | 5 | 44.70 |
| 0.28 | -7.00 | 47 | 10 | 63.25 |
| 0.31 | -6.21 | 47 | 12 | 69.28 |



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