



AM & FM Airborne Transmitter Power Amplifier Solid State RF Amplifier

Aethercomm Model Number SSPA 0.291-60 is a high power UHF Airborne transmitter power amplifier. This model operates at 291 MHz with an AM or FM excitation. The typical output power is 100 Watts for FM operation and the power is typically backed off for AM operation. This RF module offers 50 dB of typical gain. The 2nd and 3rd harmonic levels are -80 dBc maximum. The internal RF components are gated on and off in less than 500 uSec maximum. Input and output VSWR is 1.5:1 maximum. This amplifier operates from a 28Vdc power supply with a typical current of 8.75 amps at 100 watts of output power. The amplifier is biased class AB so the current increases and decreases as a function of input drive. The size of this RF amplifier is approximately a width of 9.55" with a length of 4.96 inches and height of 4.86 inches.

Standard features include reverse polarity protection and over voltage protection with an output isolator for PA protection. The output is fully protected from an infinite VSWR at the RF output port. The input RF connector is TNC Female. The output RF connector is Type N female. DC and Command voltages are accessible via military circular connectors. This amplifier operates from -20C to +65C base plate. The RF enclosure has handles and other mechanical features. This RF product is pictured to demonstrate capability. Please contact the factory with any questions you may have.

- **Operation at 291 MHz**
- **AM and FM Transmitter**
- **100 Watts Peak Output Power typ**
- **Excellent Harmonic Rejection**
- **Low Phase Noise**



This is an example of an Aethercomm standard product. Aethercomm designs and manufactures high performance, high power CW or pulsed SSPA's for commercial, military and satellite communications customer.

Aethercomm Inc. reserves the right to make changes without further notice. Aethercomm recommends that before these items herein are specified into a system or critical application that the performance characteristics be verified by contacting the factory.

SSPA 0.291-60

SSPA 0.291-60 Typical Performance @ 25°C

Freq (MHz)	Peak Output Power (dBm)	+28 Vdc Current at Peak Pout (amps)	RF Input Power at Rated Pout (dBm)	2nd Harmonic Magnitude (dBc)	3rd Harmonic Magnitude (dBc)	Power Added Efficiency (%)
291.25	50.2	8.74	1.0	-89.0	-89.0	50.2
291.40	50.2	8.74	1.0	-89.0	-89.0	50.2
291.55	50.2	8.74	1.0	-89.0	-89.0	50.2