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5312027AGC-004

**850 - 900 MHz
 12 WATTS**

Solid State Band-Specific High Power RF Amplifier

The 5312027AGC-004 is a 12 Watt amplifier that covers the 850 – 900 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3rd order intercept point, high gain, and a wide dynamic range.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability. Like all OPHIR_{RF} amplifiers, the 5312027AGC-004 comes with an extended

	Parameter	Specification @ 25 °C
<u>Electrical</u>		
1	Frequency Range	850 – 900 MHz
2	Instantaneous Bandwidth	50 MHz min
3	Saturated Output Power	12 Watts typical
4	Power Output @ 1dB Comp.	10 Watts min
5	Small Signal Gain	+45 dB min
6	Gain Flatness	±1.0 dB max
7	IP ₃ *	+50 dBm min @ 28 dBm / Tone
8	Input VSWR	1.5:1 max.
9	Output VSWR	1.6:1 max.
10	Harmonics	-20 dBc typical @ 10 W Pout
11	Spurious Signals	> -60 dBc typical @ 10 W Pout
12	DC Input Current	3.5 Amps max @ 31 dBm
13	DC Input	14.0 ± 1.0 VDC
14	RF Input	+10 dBm max
15	RF Input Signal Format	CW/AM/FM/PM/Pulse
16	Class of Operation	AB
17	Noise Figure	< 15 dB typical
<u>Mechanical</u>		
18	Dimensions	6.0" x 2.75" x 0.8"
19	Weight	1 lb. max
20	Connectors	SMA female
21	Grounding	Chassis
22	Cooling	Adequate Heatsink Required
<u>Environmental</u>		
23	Baseplate Temperature	0° C to +70° C
24	Operating Humidity	95% Non-condensing
25	Operating Altitude	Up to 10,000' Above Sea Level
26	Shock and Vibration	Normal Truck Transport

* IP₃ is measured with a two tone signal, 500 KHz spacing.



Included Features

- ◇ AGC
- ◇ Detected RF Output (0 to +5 VDC)
- ◇ Thermal Shutdown