



5300 Beethoven Street, Los Angeles, CA 90066  
 TEL: (310)306-5556 • FAX: (310)577-9887  
 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

**5312027AGC-003**

**935 - 960 MHz**  
**12 WATTS**

### Solid State Band-Specific High Power RF Amplifier

The 5312027AGC-003 is a 12 Watt amplifier that covers the 935 – 960 MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3<sup>rd</sup> 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<sub>RF</sub> amplifiers, the 5312027AGC-003 comes with an extended

	Parameter	Specification @ 25 °C
<b>Electrical</b>		
1	Frequency Range	935 – 960 MHz
2	Instantaneous Bandwidth	25 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 <sub>3</sub> *	+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
<b>Mechanical</b>		
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
<b>Environmental</b>		
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

\* IP<sub>3</sub> is measured with a two tone signal, 500 KHz spacing.



### Included Features

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