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MODEL 5303012A-217

0.8 - 2.17 GHz 10 WATTS LINEAR POWER RF AMPLIFIER

Solid State Broadband High Power RF Amplifier

The 5303012A-217 is a 10 Watt broadband amplifier that covers the 0.8 – 2.17 GHz 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 5303012A-217 comes with an extended multiyear warranty.

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| | <u>Parameter</u> | Specification @ 25° C |
| <u>Electrical</u> | | |
| 1 | Frequency Range | 0.8 – 2.17 GHz |
| 2 | Saturated Output Power | 0.8 - 1.99 GHz, 10 Watts min. 2.0 - 2.17 GHz, 8 Watts min. 2.0 - 2.17 GHz, 10 Watts typ. |
| 3 | Power Output @ 1dB Comp. | 0.8 - 1.99 GHz, 6 Watts min. 2.0 - 2.17 GHz, 5 Watts min. |
| 4 | Small Signal Gain | +41 dB min |
| 5 | Gain Flatness | <u>+</u> 1.5 dB max |
| 6 | IP ₃ | +50 dBm typical |
| 7 | Input VSWR | 2:1 max |
| 8 | Harmonics | -20 dBc typical @ 8 Watts |
| 9 | Spurious Signals | < -60 dBc typical @ 8 Watts |
| 10 | Input/Output Impedance | 50 Ohms nominal |
| 11 | DC Input Current | 6 Amps max |
| 12 | DC Input | 13 VDC nominal |
| 13 | RF Input | +10 dBm max |
| 14 | RF Input Signal Format | CW/AM/FM/PM/Pulse |
| 15 | Class of Operation | A/AB |
| <u>Mechanical</u> | | |
| 16 | Dimensions | 6.8" x 2.7" x 1.0" |
| 17 | Weight | 2 lb. max |
| 18 | Connectors | SMA female |
| 19 | Grounding | Chassis |
| 20 | Cooling | Adequate Heatsink Required |
| <u>Environmental</u> | | |
| 21 | Baseplate Temperature | 0° C to +50° C |
| 22 | Operating Humidity | 95% Non-condensing |
| 23 | Operating Altitude | Up to 10,000' Above Sea Level |
| 24 | Shock and Vibration | Normal Truck Transport |
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Specifications subject to change without notice.

