

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

## MODEL 5038-016

1.1 - 1.7 GHz **200 WATTS** LINEAR POWER RF AMPLIFIER

# **Solid State Broadband High Power RF Amplifier**

The 5038-016 is a 200 Watt broadband amplifier that covers the 1.1 - 1.7 GHz frequency range. This is the perfect choice for a GPS Jamming solution. 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 this components, amplifier achieves high efficiency operation with proven reliability. Like all OPHIR<sub>RF</sub> amplifiers, the 5038-016 comes with an extended multiyear warranty.

Electrical         1         Frequency Range         1.1 – 1.7 GHz           2         Saturated Output Power         200 Watts Minimum           3         Small Signal Gain         +53 dB Minimum           4         Small Signal Gain Flatness         ± 1.5 dB max           5         IP3         +59 dBm typical           6         Input VSWR         2:1 max           7         Harmonics         -20 dBc Typical           8         Spurious Signals         < -60 dBc Typical           9         Input/Output Impedance         50 Ohms nominal           10         AC Input Power         1000 Watts max           11         AC Input         100 – 240 VAC, single phase           12         RF Input         +10 dBm max           13         RF Input Signal Format         CW/AM/FM/PM/PM/Pulse
2       Saturated Output Power       200 Watts Minimum         3       Small Signal Gain       +53 dB Minimum         4       Small Signal Gain Flatness       ± 1.5 dB max         5       IP3       +59 dBm typical         6       Input VSWR       2:1 max         7       Harmonics       -20 dBc Typical         8       Spurious Signals       < -60 dBc Typical         9       Input/Output Impedance       50 Ohms nominal         10       AC Input Power       1000 Watts max         11       AC Input       100 – 240 VAC, single phase         12       RF Input       +10 dBm max
3       Small Signal Gain       +53 dB Minimum         4       Small Signal Gain Flatness       ± 1.5 dB max         5       IP <sub>3</sub> +59 dBm typical         6       Input VSWR       2:1 max         7       Harmonics       -20 dBc Typical         8       Spurious Signals       < -60 dBc Typical         9       Input/Output Impedance       50 Ohms nominal         10       AC Input Power       1000 Watts max         11       AC Input       100 – 240 VAC, single phase         12       RF Input       +10 dBm max
4       Small Signal Gain Flatness       ± 1.5 dB max         5       IP <sub>3</sub> +59 dBm typical         6       Input VSWR       2:1 max         7       Harmonics       -20 dBc Typical         8       Spurious Signals       < -60 dBc Typical         9       Input/Output Impedance       50 Ohms nominal         10       AC Input Power       1000 Watts max         11       AC Input       100 – 240 VAC, single phase         12       RF Input       +10 dBm max
5         IP <sub>3</sub> +59 dBm typical           6         Input VSWR         2:1 max           7         Harmonics         -20 dBc Typical           8         Spurious Signals         < -60 dBc Typical           9         Input/Output Impedance         50 Ohms nominal           10         AC Input Power         1000 Watts max           11         AC Input         100 – 240 VAC, single phase           12         RF Input         +10 dBm max
6 Input VSWR 2:1 max 7 Harmonics -20 dBc Typical 8 Spurious Signals <-60 dBc Typical 9 Input/Output Impedance 50 Ohms nominal 10 AC Input Power 1000 Watts max 11 AC Input 100 - 240 VAC, single phase 12 RF Input +10 dBm max
7 Harmonics -20 dBc Typical 8 Spurious Signals <-60 dBc Typical 9 Input/Output Impedance 50 Ohms nominal 10 AC Input Power 1000 Watts max 11 AC Input 100 - 240 VAC, single phase 12 RF Input +10 dBm max
8 Spurious Signals < -60 dBc Typical 9 Input/Output Impedance 50 Ohms nominal 10 AC Input Power 1000 Watts max 11 AC Input 100 – 240 VAC, single phase 12 RF Input +10 dBm max
9 Input/Output Impedance 50 Ohms nominal 10 AC Input Power 1000 Watts max 11 AC Input 100 – 240 VAC, single phase 12 RF Input +10 dBm max
10         AC Input Power         1000 Watts max           11         AC Input         100 – 240 VAC, single phase           12         RF Input         +10 dBm max
11 AC Input 100 – 240 VAC, single phase 12 RF Input +10 dBm max
12 RF Input +10 dBm max
·
13 RF Input Signal Format CW/AM/FM/PM/Pulse
14 Class of Operation A/AB
<u>Mechanical</u>
15 Dimensions 19" x 7" x 20"
16 Weight 57 lb. max
17 Connectors Type-N
18 Grounding Chassis
19 Cooling Internal Forced Air
<u>Environmental</u>
20 Operating Temperature 0° C to +50° C
21 Operating Humidity 95% Non-condensing
22 Operating Altitude Up to 10,000' Above Sea Level
23 Shock and Vibration MIL-STD-810F Method 516.5

#### CIRCUIT PROTECTIONS

- ♦ Thermal Overload
- ♦ Over Current
- ♦ Over Voltage
- ♦ VSWR protection

#### CIRCUIT CONTROL

- ♦ Standby (amplifier disable)
- ♦ Gain/power setting with 25dB range
- ♦ VSWR protection Reset

#### CIRCUIT INDICATIONS

- ♦ Forward Power
- ♦ Reflected power
- ♦ VSWR Fault
- ♦ Temp Fault

08/10

♦ Gain Setting (VVA) percentage

### **ORDERING MODELS**

- ♦ RE - Rear Panel model with RS232, IEEE, & Ethernet
- ♦ FE - Front Panel model with RS232, IEEE, & Ethernet

TY FORM MATERS	
FF Model Shown	

Specifications subject to change without notice.

Approved By: Date: