



BHX002

4 Watt Power Amplifier

Applications

- Phased array transmitter element
- Radar or EW Systems
- Laboratory use

Key Features

- 4W nominal CW power
- 6-18GHz frequency range
- Dual outputs, switchable
- Modulation input control
- Compact module 53mm x 50mm x 10mm
- Bare aluminium finish (6061), cooling via baseplate

Specifications

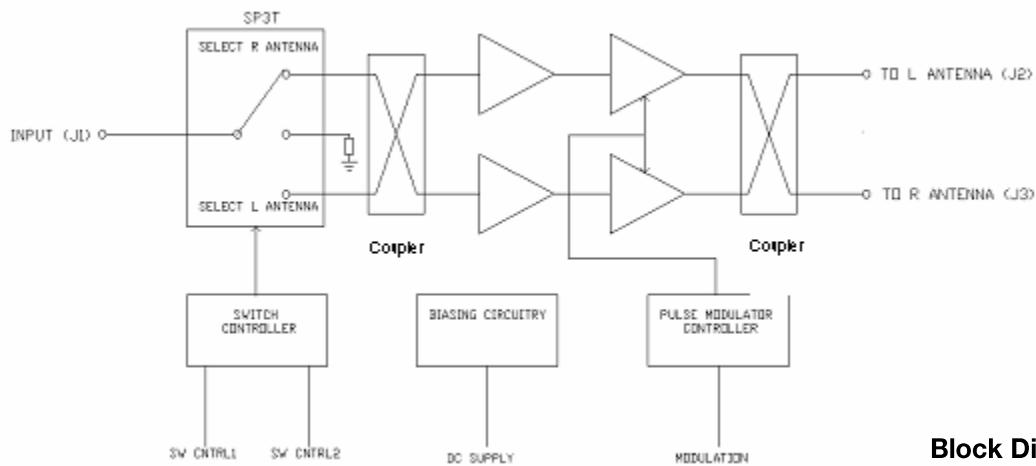
Frequency Range:	6-18GHz
Fundamental Rated Output Power at 1dB Compression @ 25°C	35dBm min, 35.5dBm typ, 6-9GHz 35dBm min, 36.0dBm typ, 9-14GHz 32dBm min, 34.0dBm typ, 14-16GHz 35dBm min, 35.3dBm typ, 16-18GHz
Variation in Rated Output Power at P _{1dB} Compression vs Temperature	+0.5dB typical @ -54°C -0.2dB typical @ 50°C
Saturated Output Power	0.5dB above P _{1dB}
Input Power Window for Saturated Output Power	-2.0 - +4.0dBm typ, +25°C
Amplitude Matching to Reference	±0.3dB typical, ±1.75dB max
Phase Matching to Reference	±7 degrees typ, ±20 degrees max
Small Signal Gain	34.0dB average, 25°C 38.0dB average, -54°C 33.5dB average, +50°C
Harmonic Output Level @ P _{1dB}	Typically better than -15dBc
Output Two-Tone Third Order	Typically +39dBm
L/R Switch Performance	Non-reflective ports
L/R Switching Speed	80nS typical
L/R Switch Video Leakage	<-50dBm
L/R Switch Isolation	Typically better than 10dB
Modulation: PRF	500kHz max.
Switching Time	60ns ON & OFF typical
In/Out VSWR	2:1
Load VSWR (1), (3)	2:1 for 85% of band, 3:1 max
Power Supply (2)	3A typ off +8.25V rail at P _{1dB} 20mA typ off -12V @ P _{1dB}

Notes:

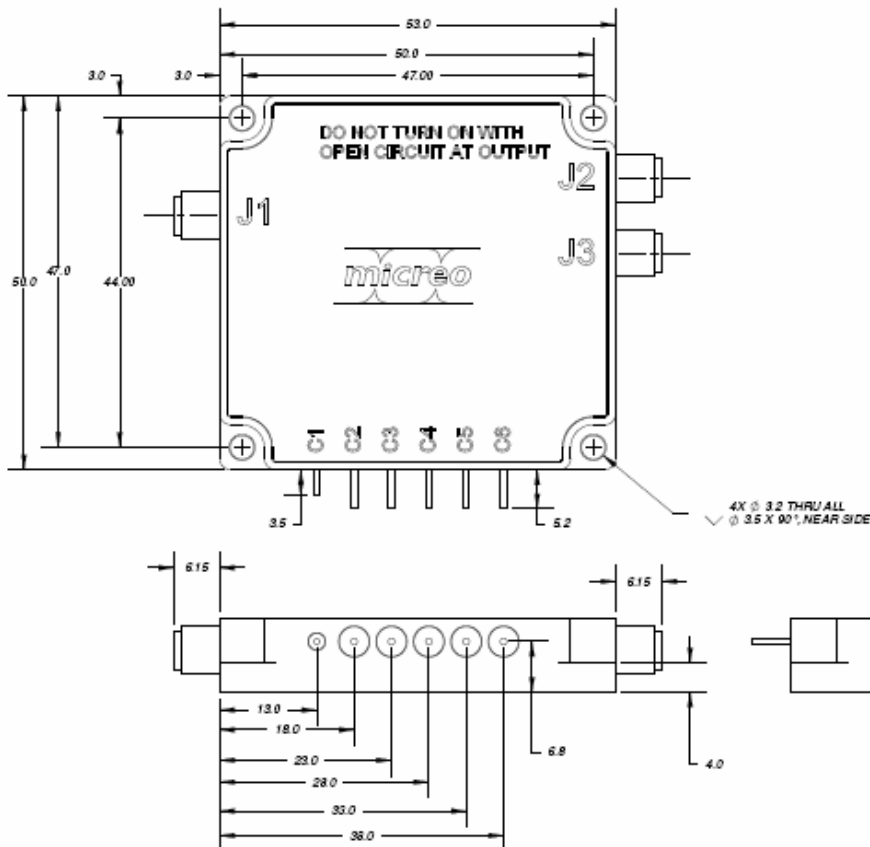
- (1) At 3:1 VSWR, the output power will reduce by 1.2dB due to mismatch loss
- (2) No internal rail regulation. Recommended rail regulation is ±2.5%
- (3) Unit must be operated with 50ohm load at output



Micreo
one step ahead



Block Diagram



Outline Drawing
(Dimensions in mm)



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Ordering information:

592-BHX002-S 4W Power Amplifier with SMA Connectors
592-BHX002-G 4W Power Amplifier with GPO Connectors

Please contact us for more information.

L3 Micreo reserves the right to amend specifications in the light of continuing development.
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