

Description

The HHPAV-433 Power Amplifier covers the frequency range from 59.5 to 60.5 GHz and is usable over the range of 58 to 64 GHz. The amplifier has an output power of +28.5 Psat and 18 dB gain.

MMIC technology is employed for high reliability and repeatability employing one die. A single +6.0V bias is used to power up the amplifier. An onboard voltage regulator and bias sequencing circuitry provide the proper biasing for the unit.

A power level of greater than 1W can be achieved in the same mechanical envelope - (1" H X 1.3" L X 1.35" D) using two MMICS.

The amplifier can be used in transmitters for communication and radar systems and also as part of test equipment suites.

This product is for domestic sale only.



Applications

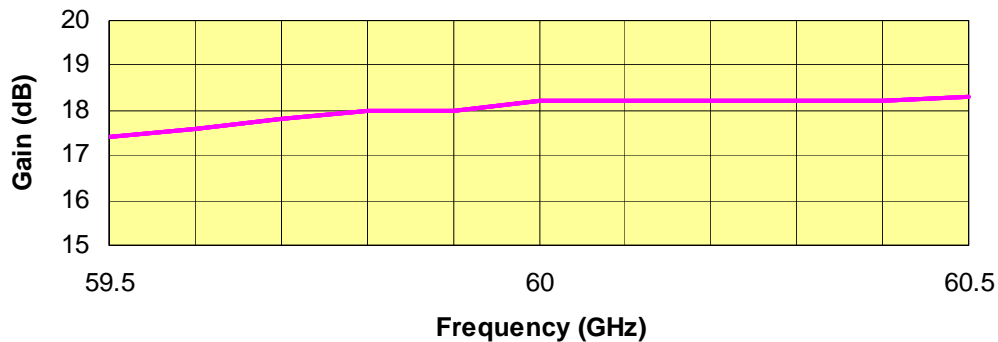
- Terrestrial Communications
- Radar Transmitters
- Test Equipment
- Satellite Crosslinks

Features

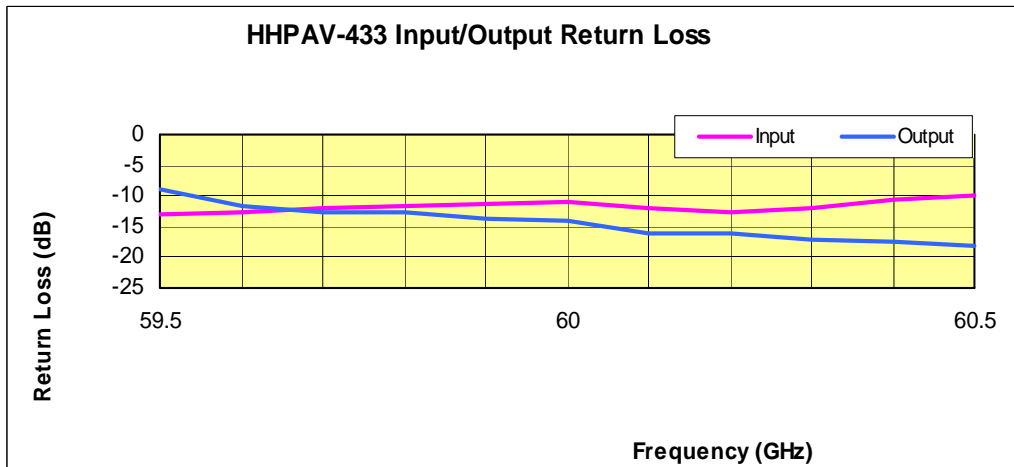
- High P_{1dB} or PSAT
- Single Bias / Internal Regulation
- Internal Bias Sequencing
- In-line RF ports

HHPAV-433 Specifications				
Parameter	Minimum	Typical	Maximum	
Frequency Range	59.5		60.5	GHz
Small Signal Gain		18		dB
P _{1dB}		+25		dBm
P _{SAT}		+28.5		dBm
Third Order Intercept		+34		dBm
Input Return Loss		10 typ		dB
Output Return Loss		10 typ		dB
Interface	WR-15, UG-385/U			
DC Bias	+6.0 VDC @ 1.1A typical (linear operation) +6.0 VDC @ 1.35A typical (P _{SAT} operation)			

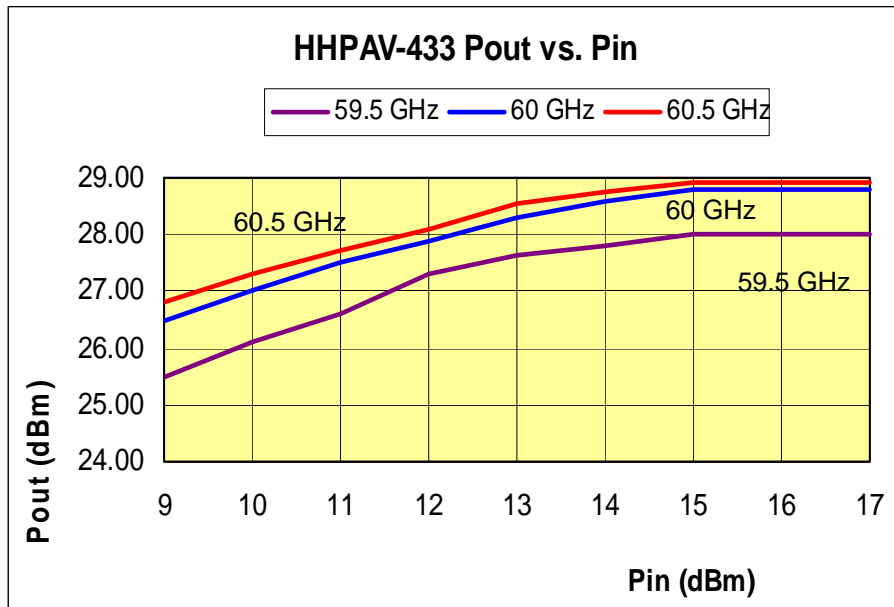
HHPAV-362 Gain vs. Frequency



HHPAV-433 Input/Output Return Loss



Typical Output Power Data for HHPAV-362 Power



Other Available Power Amplifiers for 50 to 70 GHz

This is just a sample listing of available power amplifiers.
Please choose from these models or contact factory with your requirements.
Please identify your required frequency range with any inquiry.

Model Number	Frequency Range (GHz)	Input/Output	P _{1dB} (dBm) typical	Gain (dB) typical
HMPAU-1B	50.0-60.0	WR-19, UG-383/U	+10	12
HMPAU-2B	50.0-60.0	WR-19, UG-383/U	+14	21
HMPAV-1A	50.0-60.0	WR-15, UG- 385/U	+10	12
HMPAV-2A	50.0-60.0	WR-15, UG- 385/U	+14	21
HHPAVC-250	50.0-66.0	1.85 mm Female	+16	35
HHPAV-261	53.0-60.0	WR-15, UG- 385/U	+14	15
HMPAV-1B	55.0-65.0	WR-15, UG- 385/U	+10	12
HHPAV-297	55.0-65.0	WR-15, UG- 385/U	+13	30
HHPAV-222	55.0-65.0	WR-15, UG- 385/U	+14	25
HHPAV-355	55.0-65.0	WR-15, UG- 385/U	+17.5	28
HHPAV- 082	57.0-59.0	WR-15, UG- 385/U	+18	28
HHPAV-330	57.0-66.0	WR-15, UG- 385/U	+14	25
HHPAV-295	57.0-66.0	WR-15, UG- 385/U	+15	29
HHPAV-254	57.5-66.0	WR-15, UG- 385/U	+17	25
HHPAV- 070	59.0-61.0	WR-15, UG- 385/U	+16	20
HHPAV- 023	59.0-61.0	WR-15, UG- 385/U	+18	25
HHPAV-186	59.5-63.5	WR-15, UG- 385/U	+18	30
HHPAV-356	60.0-62.0	WR-15, UG- 385/U	+18	30
HHPAV- 050	62.0-64.0	WR-15, UG- 385/U	+16	30

Specifications @ 35°C T_{CASE}, Specifications subject to change w/o notice.