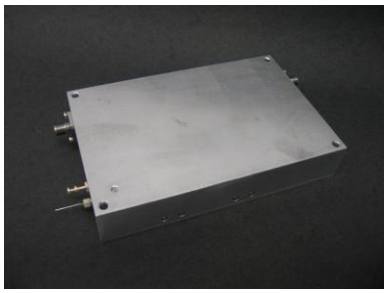
ZHM-3560 -1

Linear Power Amplifier
3.5 ~ 6.0 GHz, 1W

The ZHM-3560 -1 is a compact, broadband linear amplifier ideal for use in test and measurement systems and RF Lab set-up.



Key Features:

Broad Frequency Range:	3.5 ~ 6.0 GHz
High Gain:	32 dB
High Power (P_{1dB}):	30 dBm
Impedance:	50 Ohm
Single DC Supply:	0.7 A @ +13 V (-1V +2V)
Monitoring all Parameters	Through RS-232 P_{FWD}, P_{REV}, Supply Voltage, Supply Current, Temperature
Wide Operating Temp:	0 ~ +60°C

Absolute Maximum Ratings:

Parameters	Symbol	Value	Units
DC Power Supply Voltage	V_{dd}	15	V
DC Power Supply Current	I_{dd}	0.75	A
Total Power Dissipation	P_{diss}	11	W
RF Input Power	$P_{In,Max}$	10	dBm
Load VSWR tolerance	VSWR	3:1	
Maximum Operating Heatsink Temp.	$T_{O,Max}$	+65	°C

Electrical Specifications: (at room temperature)

Testing Item	Symbol	Test Constraints	Min	Typ	Max	Unit
Gain	S_{21}	3.5 ~ 6.0 GHz	30	32	33	dB
Gain Variation	$_{\Delta}G$	3.5 ~ 6.0 GHz		± 0.8	± 1.2	dB
Input Reflection	S_{11}	3.5 ~ 6.0 GHz		-10		dB
Output Power @ 1dB Gain Comp. Point	P_{1dB}	3.5 ~ 6.0 GHz	29	30	31	dBm
Power Supply Voltage	V_{dd}		12	13	15	V
Current Consumption @ no RF input	I_{dq}	V_{dd} = +13 V		0.5		A
Current Consumption @ P1dB	I_{dq}	V_{dd} = +13 V		0.6		A
Operating Temperature	T_O		0		+60	°C

Frequency Response

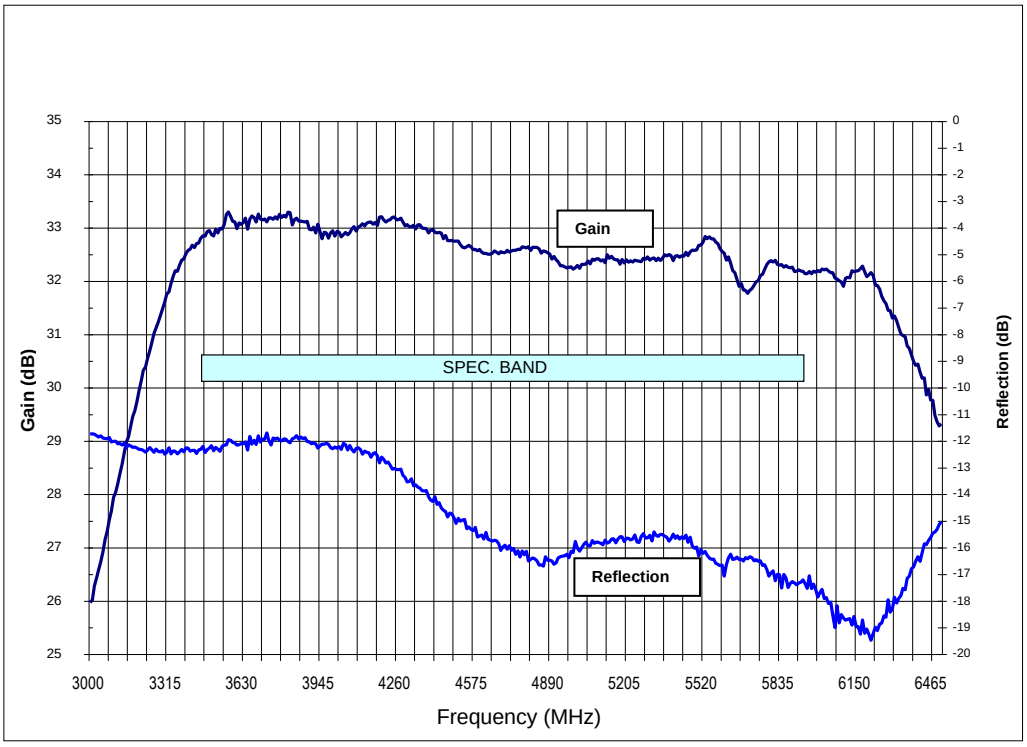


FIG. 1 Small signal performance

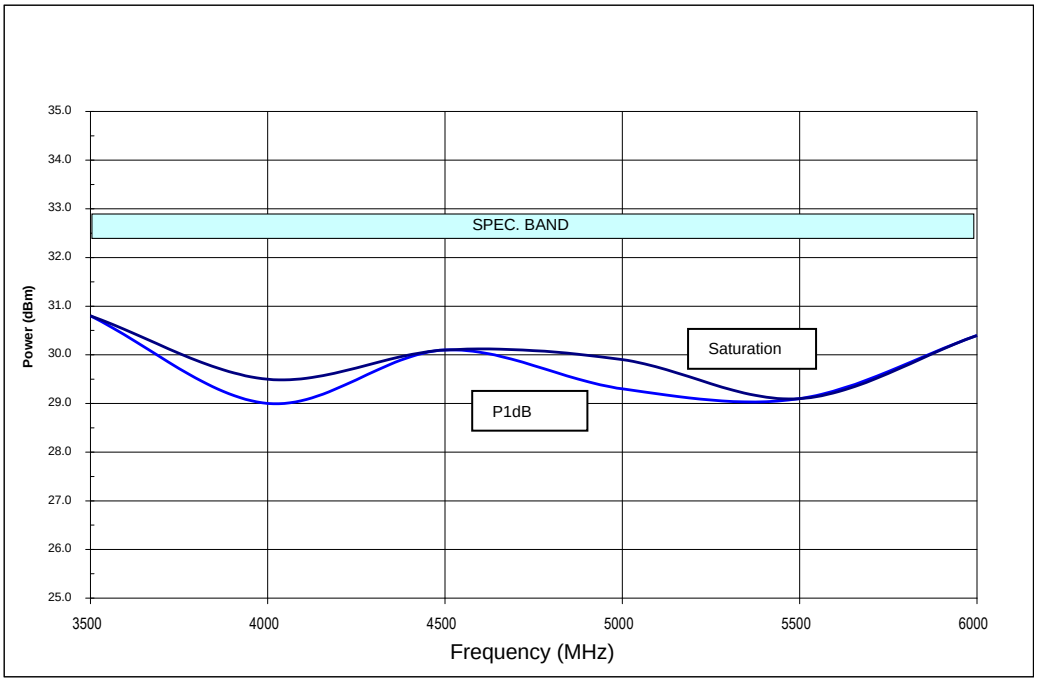


FIG. 2 P_{1dB}, P_{SAT}

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Mechanical Outline: (all units in mm)