

ZH-2060B

HIGH POWER AMPLIFIER 40 W

2.0 GHz – 6 GHz



Export restricted item

The ZH-2060B is suitable for broadband mobile Jamming and band specific high power linear applications in the P/L/S frequency bands. This compact module utilizes high power advanced GaN devices that provide excellent power density, high efficiency, wide dynamic range and low distortions. Exceptional performance, long term reliability and high efficiency are achieved by employing advanced broadband RF matching networks and combining techniques, EMI/RFI filters, machined housings and qualified components. Empower RF's ISO9001 Quality Assurance Program assures consistent performance and the highest reliability.

- Solid-state Class AB linear design
- Frequency range 2000 MHz-6000 MHz
- Ultra broadband
- 19" rack mount design
- Built-in control, monitoring and protection circuits
- Suitable for CW, AM and FM
- 50 ohm input/output impedance
- High reliability and ruggedness

Electrical Specifications: @ +28.0VDC, 25°C 50Ω System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	2000		6000	MHz
Output Power CW	P _{SAT}		40		Watt
Output Power @ 1dB Gain Compression	P _{1dB}		10		Watt
Power Gain @ P _{1dB}	G _{1dB}		49		dB
Input Power for Rated P _{SAT}	P _{IN}		0		dBm
Gain Flatness @ Rated P _{SAT}	ΔG		±1.0	±2.0	dB
Gain Adjustment Range	VVA	25			dB
Input Return Loss	S ₁₁			-10	dB
Noise Figure @ Full Gain	NF			10	dB
Third Order Intercept Point 2-Tone @ 39.5 dBm/Tone, Δ = 100kHz	IP3		+50		dBm
Harmonics @ Rated P _{1dB}	2 nd / 3 rd		-25 / -40		dBc
Spurious Signals	Spur		-70	-60	dBc
Operating Voltage	V _{DC}	27	28	29	Volt

Current Consumption @ $P_{OUT} = 35W$	I_{DD}	7.5	10	Amp
Quiescent Current	I_{DQ}	4.0	6.0	Amp
Switching Time @ 1kHz TTL, $P_{IN} = 0dBm$	T_{ON} / T_{OFF}		5.0	μs

Mechanical Specifications

Parameter	Value	Units	Limits
Dimensions	5.65 x 12.5 x 1.75	Inch	Max
Weight	2.0	lb.	Max
RF Connectors Input/Output	Type-SMA, Female		
DC Interface Connector	D-Sub 9-Pin, Male		
Cooling	External Heatsink		

Environmental Characteristics (Design to Meet)

Parameter	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	T_C	-20		+70	$^{\circ}C$
Storage Temperature	T_{STG}	-40		+85	$^{\circ}C$
Relative Humidity (non-condensing)	RH			95	%
Altitude (MIL-STD-810F Method 500.4)	ALT			30,000	Feet
Vibration/Shock MIL-STD-810F - Method 514.5/516.5 – Proc I	VI/SH		Airborne		

Typical Performance Plots

