

TECHNICAL DATASHEET

AVBR260400H37

The AVBR260400H37 is a 5W high gain Solid State Broadband High Power Amplifier. This amplifier module utilizes the latest high power RF GaN transistors and also features built in control and monitoring, with protection functions to ensure high availability. This amplifier is suitable for broadband jamming and EMC testing.

Features

26.5GHz-40GHz frequency range	Solid-state Class AB Broadband design
Psat 37dBm type, 36dBm min	Instantaneous ultra-broadband
Power gain 37dB	Suitable for CW, and Pulse
50 ohm input/output impedance	Small and lightweight
Built-in control, monitoring and protection circuits	High reliability and ruggedness

ELECTRICAL SPECIFICATIONS(T=25°C,DC Voltage= 20V, Load VSWR<1.2)

Description	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	26.5		40	GHz
Output Power CW@Pin= 0dBm	Psat	36	37		dBm
Power Gain @ Pin= 0dBm	Gp		37		dB
Power Gain Flatness @Pin= 0dBm	ΔGp		± 2.5	± 3.5	dB
Input Power for Rated PSAT	P _{IN}	-3	0	3	dBm
Harmonics @Pin= 0dBm	2 nd		N/A		dBc
Spurious Signals @Pin= 0dBm	Spur		-60		dBc
Input Return Loss Pin= -30dBm	S11			-10	dB
Operating Voltage	VDC	16	20	22	V
Current Consumption @ Pout= 36~37dBm	IDD		2.9	3.5	A
Switching Time @ 1kHz TTL, P _{IN} = 0dBm	TON/TOFF		10		μs

MECHANICAL SPECIFICATIONS

Cooling	External Heat-Sink Needed	(Not Supplied)
Length* Width*Height[mm]		160*120*27
Weight[Kg]		1.2
RF Connector Input		2.92mm(K), Female
RF Connector Output		2.92mm(K), Female

ENVIRONMENTAL SPECIFICATIONS (Design to Meet)

Module Operation Temperature	-20	60	°C
Storage Temperature Range	-25	65	°C
Relative-Humidity	N/A		
Altitude	N/A		
Vibration/Shock	N/A		

LIMITS

Input RF drive level without damage	Pin ≤ 5	dBm
Load VSWR @ POUT = 3 W	VSWR ≤ 5:1	N/A
Thermal Degradation	90	°C

DC INTERFACE CONNECTOR – [D-Sub 7W2/7-Pin Hybrid D-sub, Male]

Pin #	Description	Specifications
A1	GND	Ground
A2	VDD	+20V
1	CURRENT SENSE	Analog voltage relative to IDD @ 100mV per Ampere
2	TEMP SENSE	Analog voltage relative to Module's Temperature @ 10 mV/°C
3	ENABLE	Amplifier Enable: TTL Logic High (3.3V) (Internally Pulled-Low)
4	GND	Ground
5	N/C	No Connection

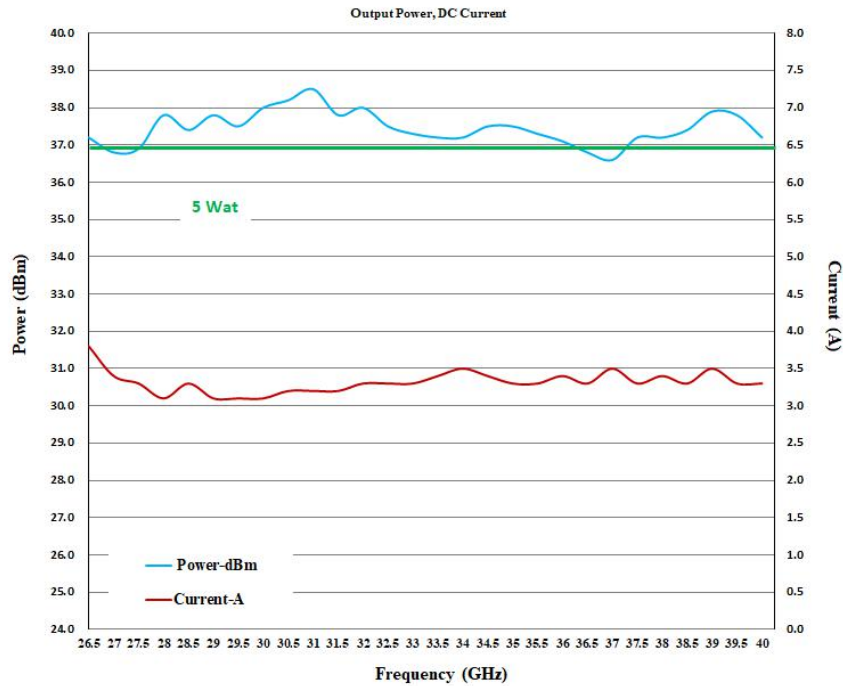
COMPLIANCE CERTIFICATIONS

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PLOTTED AND OTHER DATA

Notes:

TYPICAL PERFORMANCE DATA



OUTLINE DRAWING

