

The HD20326 is suitable for ultra broadband RF/Microwave power applications, this amplifier utilizes linear GaAsFET power devices that provide high gain, wide dynamic range, low distortions and excellent linearity. 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.

- Solid-state Class A design
- Instantaneous ultra broadband
- Small and lightweight
- Suitable for all modulations CW/FM/PM/AM/Pulse/Digital
- 50 Ohm Input/Output impedance
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS @ T=25°C, VDD=+13VDC, 50 System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	800		3000	MHz
Power Output CW	P _{sat}	2.0	3.0		Watts
Power Output @ 1dB G.C.P	P _{1dB}	1.5	-		Watts
Gain @ P1dB G.C.P	P _{1dB}	30			dB
Input Power for Rated Pout	P _{in}		0		dBm
Small Signal Gain Flatness	G		±1.0	±1.5	dB
Input/Output VSWR @ 50	S11/S22			2:1	
Noise Figure	NF		7	10	dB
Third Order Intercept Point	TOI		+43		dBm
Harmonics @ 1dB G.C.P	H		-30	-20	dBc
Spurious Signals	Spur		-70	-60	dBc
Operating Voltage	VDD	12	13	15	VDC
Current Consumption @ 2W	IDD			1.0	Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	3.11 x 2.32 x 0.66	Inch	Max
Weight (without heatsink)	0.5	lb.	Max
RF Connectors In/Out	SMA female		
DC / Shutdown Connectors	Feed Thru		
Cooling	External Heatsink		

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	T _c	0		+50	°C
Non-operating Temperature	T _{stg}	-40		+85	°C
Relative humidity w/o condensation	RH	95			%
Altitude	ALT	10,000	30,000		Feet
Shock & Vibration	SH / VI		Airborne		

PROTECTIONS

Input Overdrive	+10dBm	Max
Load VSWR	Infinite @ all load phase and amplitude	Nom
Thermal Overload	85°C shutdown	Max

OUTLINE DRAWING SHOWN WITH OPTIONAL HEATSINK

