

The HD19337 is suitable for ultra broadband and band specific high power linear applications. This amplifier utilizes Silicon MOSFET power devices that provide high gain, wide dynamic range, low distortions, and good 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 linear design
- Instantaneous ultra broadband
- Small and lightweight
- Suitable for all modulation types
- Built in Voltage Variable Attenuator
- 50 Ohm Input/Output impedance
- High reliability and ruggedness

**ELECTRICAL SPECIFICATIONS @ T=25°C, VDD=+28VDC; 50 System**

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	1		500	MHz
Power Output CW	P _{sat}	30	40		Watts
Power Output @ 1dB G.C.P	P _{1dB}	20			Watts
Power Gain @ 1dB G.C.P	G _{1dB}	44			dB
Gain Adjustment Range (VGC: 0 – 5VDC)	GC	25	30		dB
Small Signal Gain Flatness	G		±1.0	±1.5	dB
Input/Output VSWR	S11/S22			2:1	-
Noise Figure @ minimum attenuation	NF		7	10	dB
Harmonics @ 1 dB G.C.P	H		-25		dBc
Third Order Intercept Point	IP3		+53		dBm
Spurious Signals	Spur		-70	-60	dBc
Operating Voltage	VDD	24	28	32	VDC
Current Consumption @ 30W	IDD			4.0	Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions (excluding heatsink)	6.4 x 3.4 x 1.1	Inch	Max
Weight without HS	1.0	lb.	Max
RF Connectors In/Out	SMA female		
DC Connectors	Feed Thru		
Cooling	External Heatsink		

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	T _c	0	-10 to +60	+50	°C
Storage Temperature	T _{stg}	-40		+85	°C
Relative humidity w/o condensation	RH	95			%
Altitude	ALT	10,000	40,000		Feet
Shock / Vibration	SH / VI		Airborne		

PROTECTIONS

Input Overdrive	P _{0d}	+10 dBm	Max
Load VSWR		Infinite @ all load phase and amplitude	Nom
Thermal Overload	T _{0d}	85°C shutdown	Max

OUTLINE DRAWING

