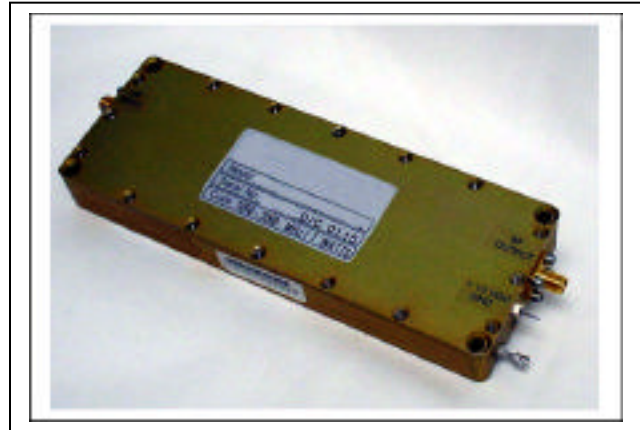


The HD19000 is suitable for broadband high power linear applications, this amplifier module utilizes GaAsFET power devices that provide high gain, wide dynamic range, low distortions and excellent linearity. Exceptional performance, long term reliability and high efficiency are achieved by employing advanced broadband RF matching networks and combining techniques, EMI/RFI filters, machined housings and qualified components.

- Solid-state Class A linear design
- Instantaneous ultra broadband
- Small and lightweight
- Suitable for all modulation types
- 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	1000		2500	MHz
Power Output CW	P <sub>sat</sub>	5	7		Watts
Power Output @ 1dB G.C.P	P <sub>1dB</sub>	4	5		Watts
Gain @ 1dB G.C.P	G <sub>1dB</sub>	36			dB
Input Power for Rated Output	P <sub>in</sub>		0		dBm
Small Signal Gain Flatness	G			±1.5	dB
Input/Output VSWR	S11/S22			2:1	-
Harmonics @ P1dB G.C.P	H		-25		dBc
Third Order Intercept Point 2 – Tones, Pout = 0.5W Avg., 500KHz spacing	IP3		+48		dBm
Noise Figure	NF		7	10	dB
Spurious Signals	Spur		-70	-60	dBc
Operating Voltage	VDD	12	13	15	VDC
Supply Current	IDD			3.0	Amp

**MECHANICAL SPECIFICATIONS**

Parameter	Value	Units	Limits
Dimensions	6.0"x2.15"x0.72"	Inch	Max
Weight	1.0	lb.	Max
RF Connectors In/Out	SMA female		
DC Connectors	Feed Thru		
Cooling	External Heatsink		

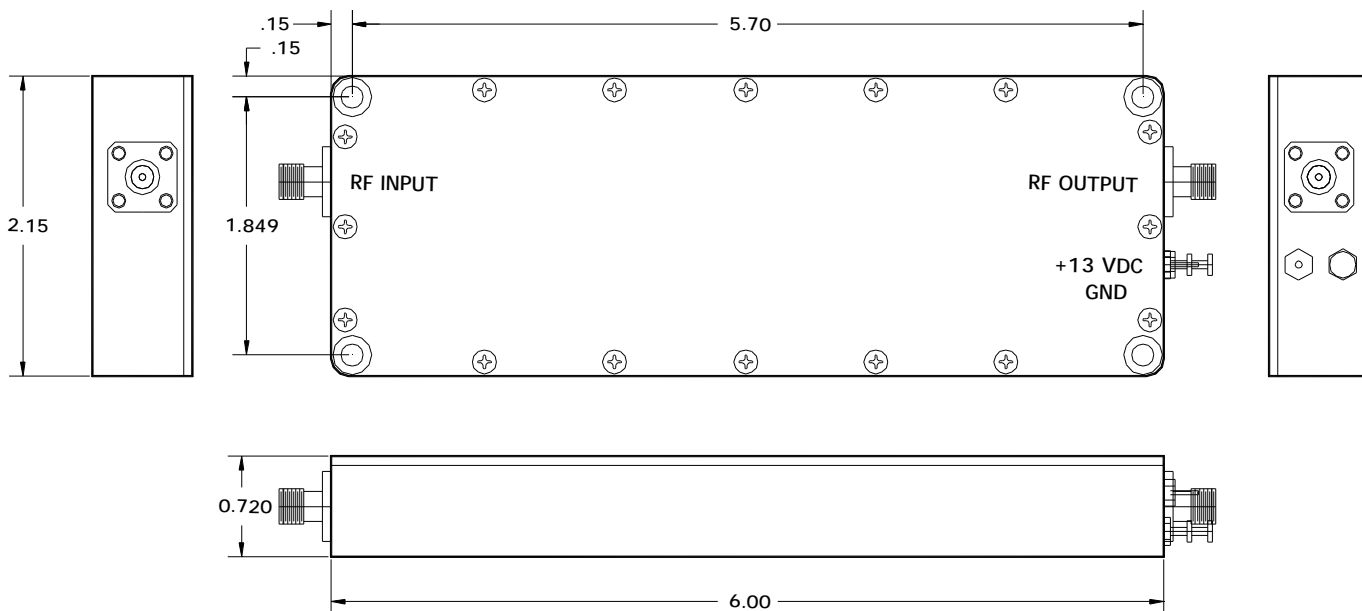
**ENVIRONMENTAL CHARACTERISTICS**

Parameter	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	Tc	0		+50	°C
Storage Temperature	Tstg	-40		+85	°C
Relative humidity w/o condensation	RH	95			%
Altitude	ALT	10,000			Feet
Shock	SH	GR-63-CORE 5.3.1			
Vibration	VI	GR-63-CORE 4.4.4			

**PROTECTIONS**

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

OUTLINE DRAWING SHOWN WITHOUT HEATSINK



Shown with optional heatsink

