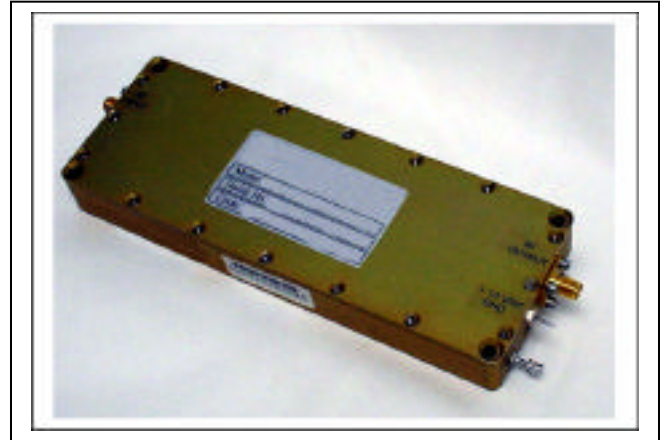


The HD19040 was designed for high power broadband linear applications utilizing HD Communications Corp.'s advanced GaAsFET technology that provide high gain, wide dynamic range, low distortions and excellent linearity. Exceptional performance, long term reliability, and high efficiency are achieved by employing advanced broadband RF matching networks and combining techniques, built in high efficiency sequence regulator, EMI/RFI filters, machined housing, and qualified components. Each unit undergoes extensive burn-in prior to final inspection.



- Solid-state class A linear design
- Instantaneous ultra broadband
- Excellent Phase Linearity and Group Delay Characteristics
- Small and lightweight
- Suitable for all modulations CW/FM/PM/AM/Pulse/Digital
- 50 Ohm Input/Output impedance
- High reliability and ruggedness

**ELECTRICAL SPECIFICATIONS**

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	1000		3000	MHz
Power Output CW	Psat	50			Watts
Power Output @ 1 dB comp.	P1dB	40			Watts
Input Power for Rated Output	Pin		4		Watts
Small Signal Gain	SSG	12			dB
Small Signal Gain Flatness	Gr			±1.5	dB
Input/Output VSWR @ 50	S11/S22			2:1	-
Third Order Intercept Point	IP3		+56		dBm
Harmonics @ 1 dB compression	H		-20		dBc
Noise Figure	NF		7	10	dB
Load VSWR					-
Spurious Signals	Spur		-60		dBc
Operating Voltage (single phase)	VDC	12	13	15	Volts
Current Consumption	Idd			24	Watts

**MECHANICAL SPECIFICATIONS**

Parameter	Value	Units	Limits
Dimensions	8.9x8.5x0.95	Inch	Max
Weight	5.0	lb.	Max
RF Connectors Input/Output	SMA female		
Cooling	External heatsink and forced air		

**ENVIRONMENTAL CHARACTERISTICS**

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	Tc	0		+50	°C
Non-operating Temperature	Tstg	-40		+85	°C
Relative humidity w/o condensation	RH	95			%
Altitude	ALT	10,000			Feet
Shock and Vibration	SV		GR-487		

**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

