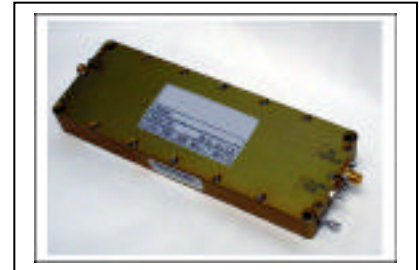


The HD19039 was designed for broadband high power linear applications; this amplifier utilizes Silicon RF Power LDMOS devices that provide high gain, wide dynamic range, low distortions and good linearity. Exceptional performance, long term reliability and high efficiency are achieved by employing advanced broadband RF matching networks and combining techniques, EMI/RFI filters, machined housings and qualified components.



- Solid-state Class AB 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=+28VDC; 50 System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	500		1000	MHz
Power Output CW	P _{sat}	200	220		Watts
Power Output @ 1dB G.C.P.	P _{1dB}		150		Watts
Power Gain @ P1dB G.C.P.	G _{1dB}	10	13		dB
Small Signal Gain Flatness	G		±1.0	±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=1W Avg., 100KHz spacing	IP3		+61		dBm
Noise Figure	NF		7	10	dB
RF Input Overdrive	OD			+10	dBm
Load VSWR @ P1dB G.C.P.				Infinite	-
Spurious Signals	Spur		-70	-60	dBc
Operating Voltage	VDD	24	28	32	VDC
Supply Current @ 200W	IDD			20	Amp

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	T _c	0		+50	°C
Storage Temperature	T _{stg}	-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			

HD Communications Corp.

Ronkonkoma, NY USA

Solid State Broadband High Power Amplifier

HD19039

Home of RFamplifiers.com

500 – 1000 MHz / 200 Watt

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	7.9"x6.0"x1.1	Inch	Max
Weight without	3.5	lb.	Max
RF Connectors In/Out	SMA female		
DC Connectors	Feed Thru		
Cooling	External Heatsink		

1 Comac Loop Ronkonkoma, NY 11779 Phone: (631) 588-3877 Fax: (631) 588-3879

E-mail: sales@rfamplifiers.com Web: <http://www.rfamplifiers.com>

