



**Power RF Amplifiers**

Power = 10.0 Watts

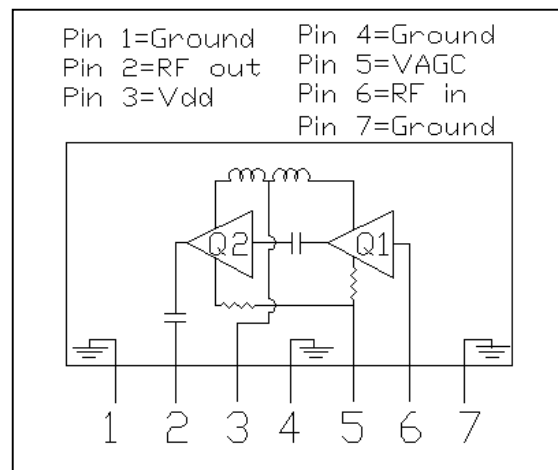
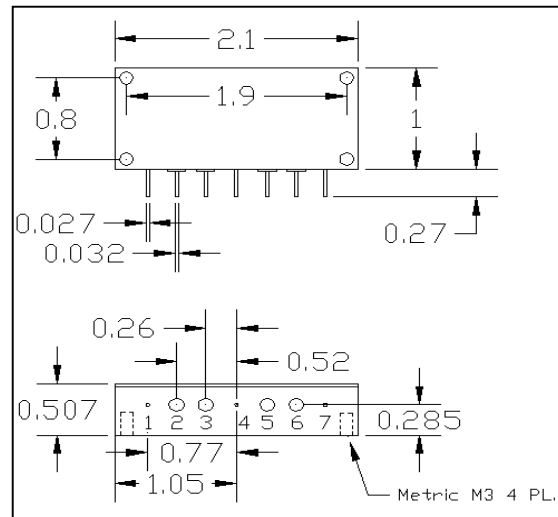
Bandwidth = 20 to 110 Mhz

Gain = 25.0 dB Vdd =28.0 Volts

50 ohms Input/Output Impedance

**Description**

The MADL01 is a 10 Watt, 2 stage high gain amplifier module covering a bandwidth of 20-110 Mhz. This compact module design is suitable for military applications in a rugged environment. A VAGC pin is provided to control the output power of the module.



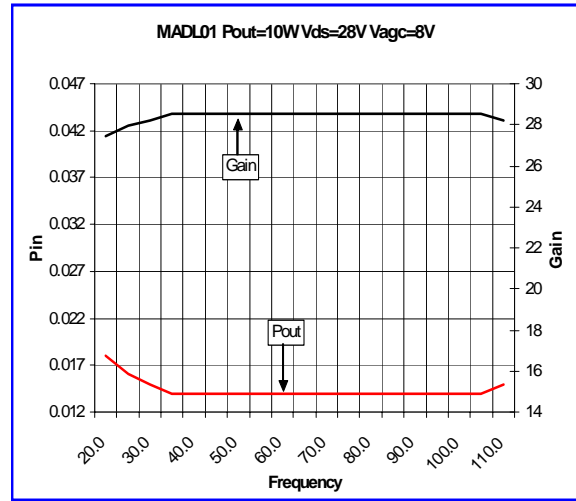
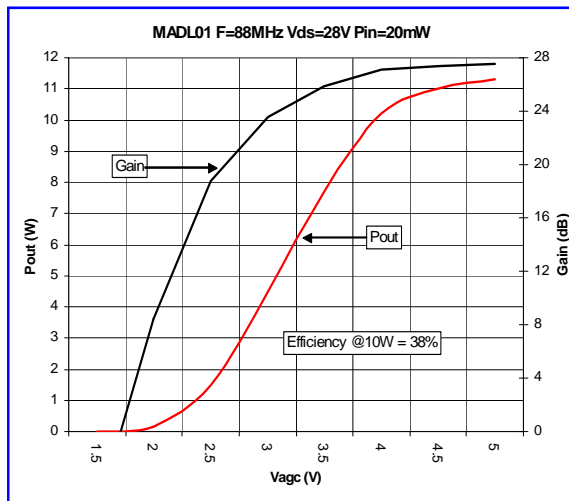
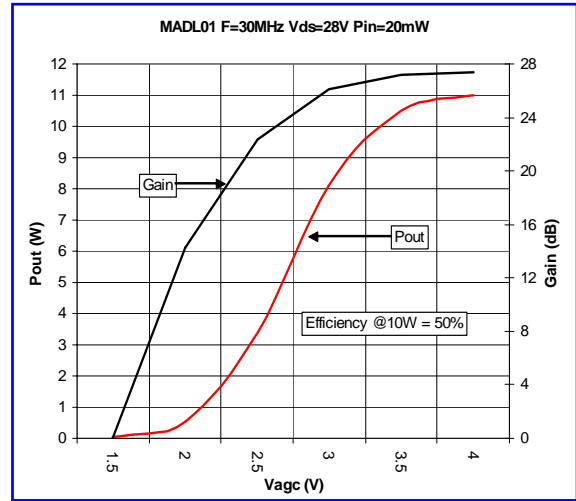
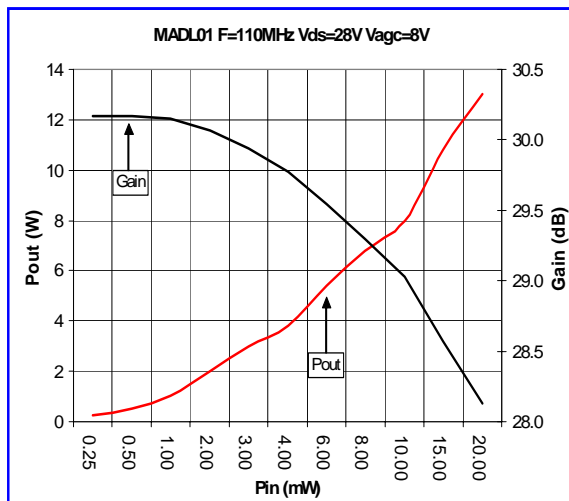
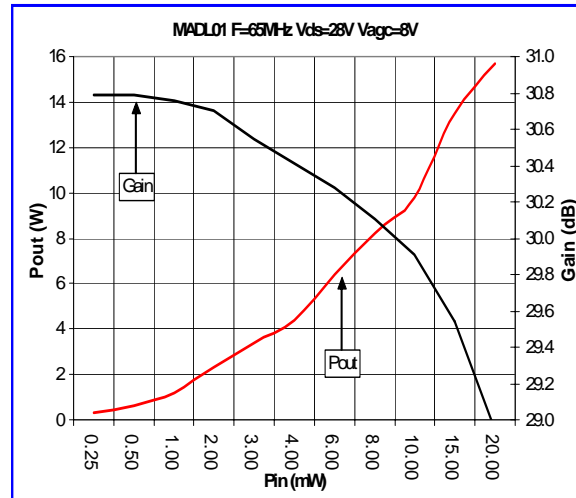
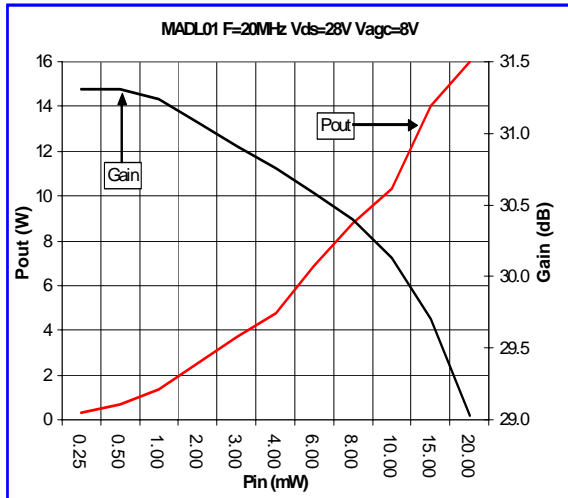
**Absolute Maximum Ratings (T=25 °C)**

Parameter	Symbol	Value	Unit
DC supply Voltage 1	VDD1	32.0	V
DC supply Voltage 2	VDD2		V
AGC Voltage	VAGC	9.0	V
AGC Current	VAGCI	5.00	mA
Input Power	Pin	0.02	W
Output Power	Pout	15.0	W
Operating Case Temp.	Tc	-40 to +85	°C
Storage Temperature	Tstg	-45 to +100	°C

**Electrical Characteristics: ( T=25 °C Zs=Zl=50 ohms, Vdd = 28.0 Volts, Idq = 1.2 Amps )**

Parameter	Symbol	Min	Typical	Max	Unit	Test Conditions
Frequency Range	BW	20		110	Mhz	50 ohm load
Output Power	Po	10.0			Watts	Pin = 13.0 dbm Vagc = 8.0 V
Power Gain	PG	25.0			dB	Pout = 10.0 Watts Vagc = 8.0 V
Total Efficiency	$\eta$	40			%	Pout = 10.0 Watts
2nd Harmonics	dso		-45.00		dBc	Pout = 10.0 Watts
Intermod - 2 tone	Im3				dBc	AvePwr= Watts
Load Mismatch Tolerance	VSWR	10:1			Relative	All Phase Angles
Vagc Voltage	VAGC			8.0	V	Pin = 13.0 dBm, Pout =10.0 W
Pulse Response Time	Pr				uS	DC Blank on Vagc pin

# MADL01



POLYFET RF DEVICES

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