



RF Power Module

Power = 15.0 Watts

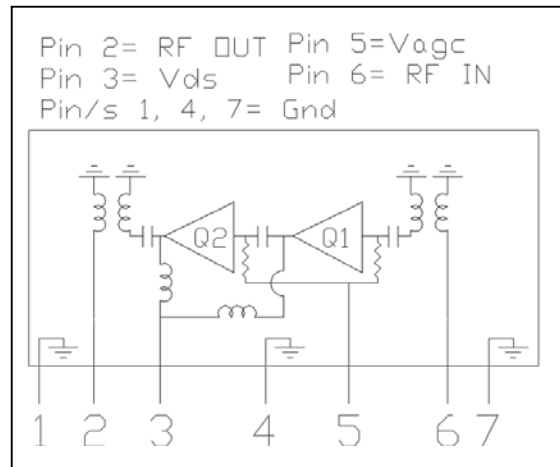
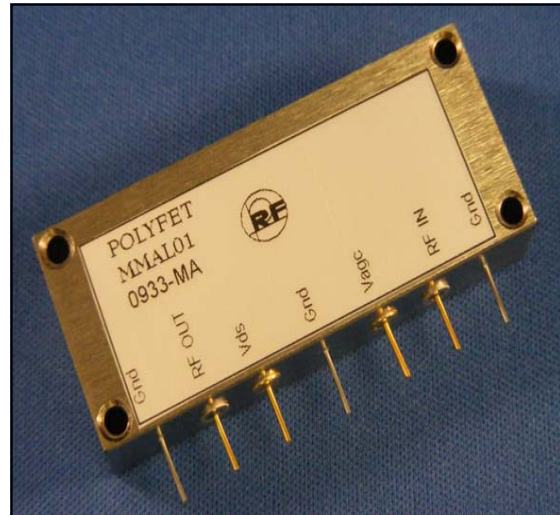
Bandwidth = 5 to 100 Mhz

Gain = 30.0 dB Vdd =25.0 Volts

50 ohms Input/Output Impedance

Description

The MMAL01 is a 15 Watt, high gain amplifier module covering a bandwidth of 5-100 Mhz. This compact module design is suitable for military applications in a rugged environment. An ALC pin is provided to control the output power, gain and blanking of the module.



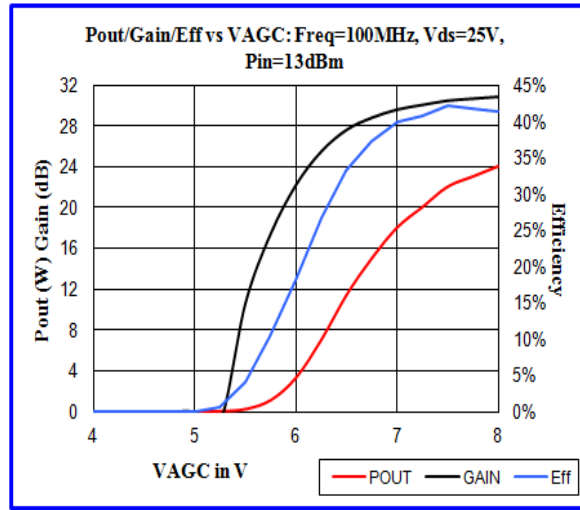
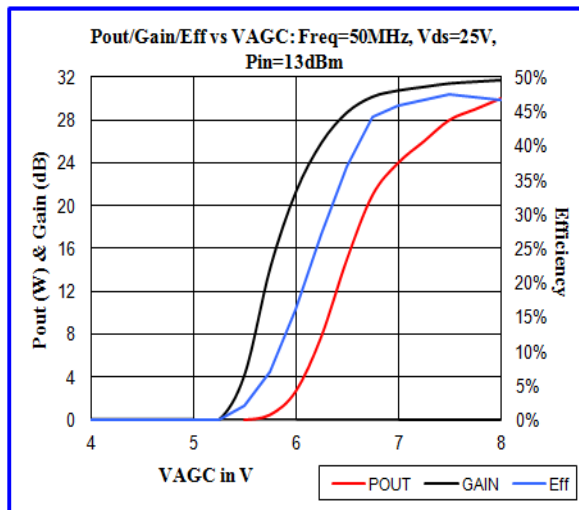
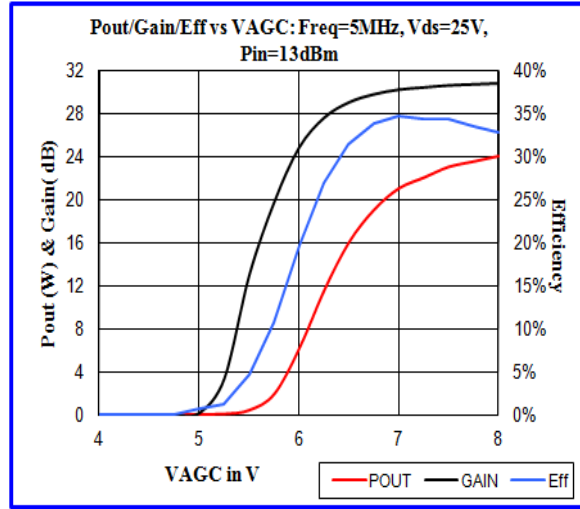
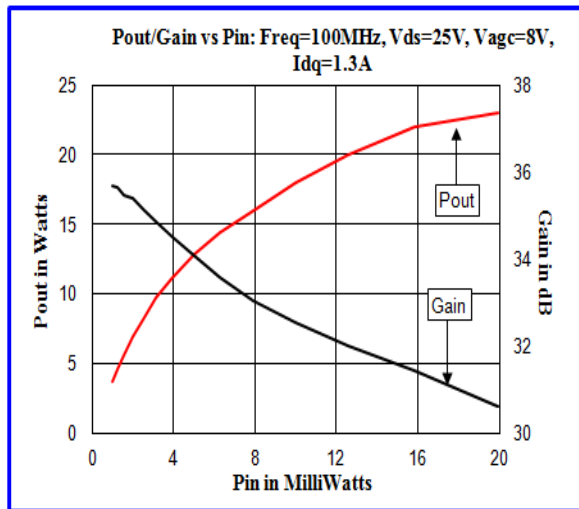
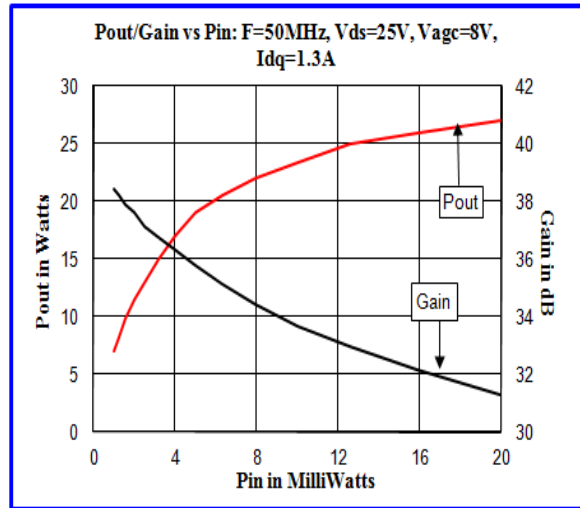
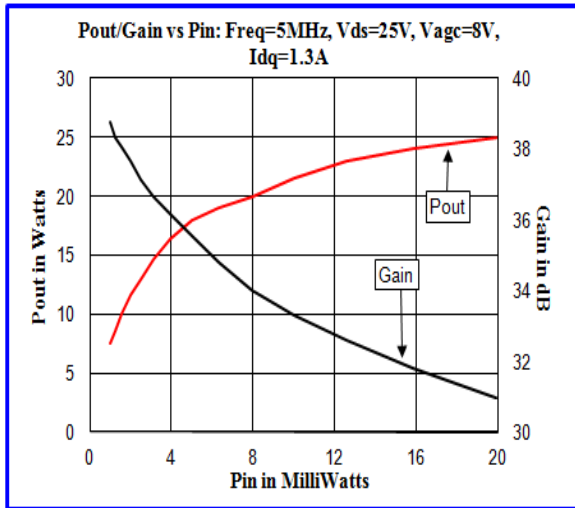
Absolute Maximum Ratings (T=25 °C)

Parameter	Symbol	Value	Unit
DC supply Voltage 1	VDD1	32.0	V
DC supply Voltage 2	VDD2		V
AGC Voltage	VAGC	10.0	V
AGC Current	VAGCI	2.50	mA
Input Power	Pin	0.025	W
Output Power	Pout	25.0	W
Operating Case Temp.	Tc	-40 to +85	°C
Storage Temperature	Tstg	-55 to +100	°C

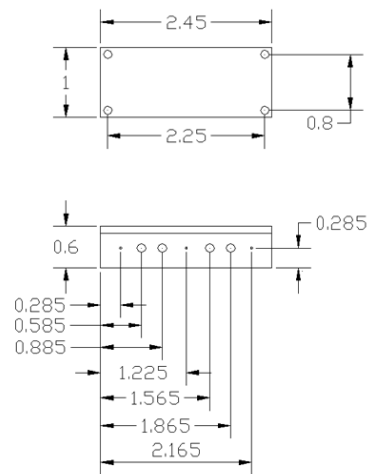
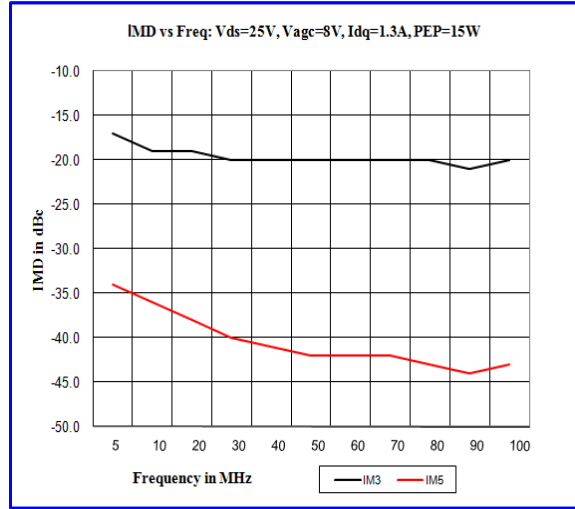
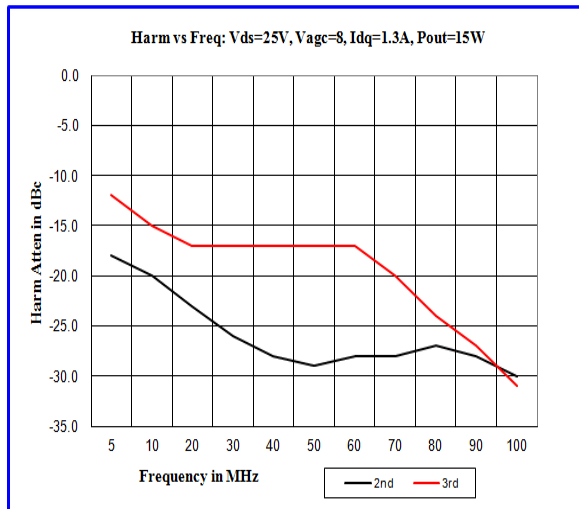
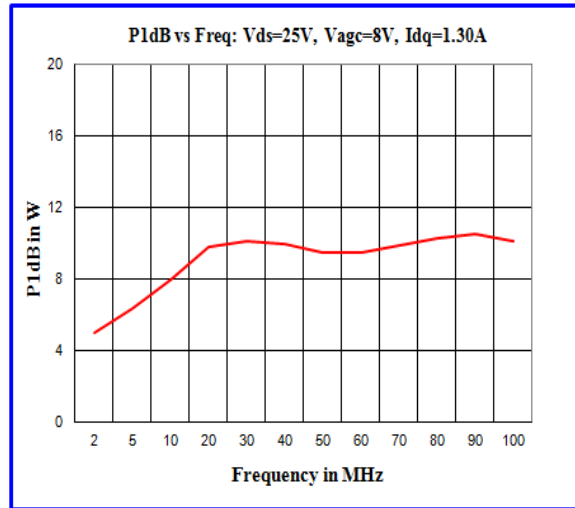
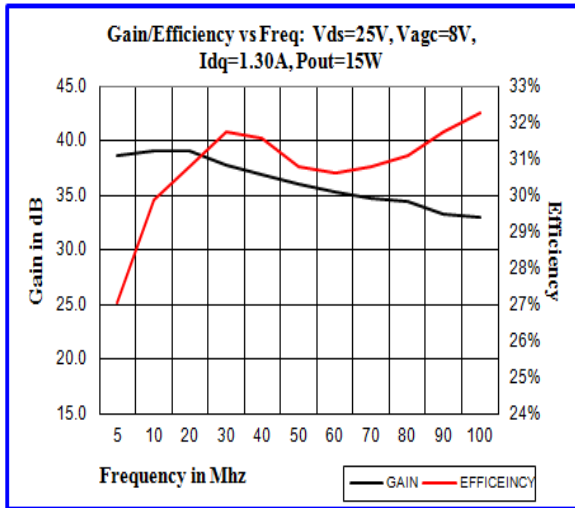
Electrical Characteristics: (T=25 °C Zs=Zl=50 ohms, Vdd = 25.0 Volts, Idq = 1.3 Amps)

Parameter	Symbol	Min	Typical	Max	Unit	Test Conditions
Frequency Range	BW	5		100	Mhz	50 ohm load
Output Power	Po	15.0			Watts	Pin = 12.0 dbm Vgac = 8.00 V
Power Gain	PG	30.0			dB	Pout = 15.0 Watts Vgac = 8.00 V
Total Efficiency	η		30		%	Pout = 15.0 Watts
2nd Harmonics	dso		-25.00		dBc	Pout = 15.0 Watts @ Mhz
Intermod - 2 tone	Im3		-20.00		dBc	AvePwr= 7.5 Watts
Load Mismatch Tolerance	VSWR	10:1			Relative	All Phase Angles Pout = 15.0 Watts
Vgac Voltage	VAGC			8.00	V	Pin = 12.0 dBm, Pout = 15.0 W
Pulse Response Time	Pr			5.0	uS	Pulse source: Vgac

MMAL01



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POLYFET RF DEVICES

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