



RF Power Module

Power = 15.0 Watts

Bandwidth = 20.0 to 520 Mhz

Gain = 27.0 dB Vdd =24.0 Volts

50 ohms Input/Output Impedance

Description

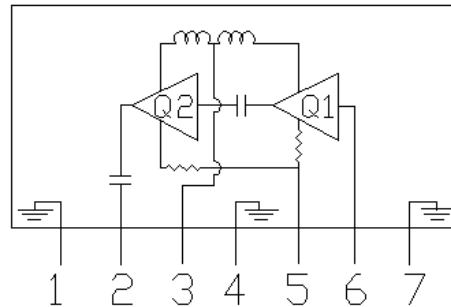
The MCCQ04 is a 15 Watt, 2 stage high gain amplifier module covering a bandwidth of 20-520 Mhz. The operating temperature range is extended to -40C to +85C



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	30.00	mA
Input Power	Pin	0.030	W
Output Power	Pout	25.0	W
Operating Case Temp.	Tc	-40 to +85	°C
Storage Temperature	Tstg	-55 to +100	°C

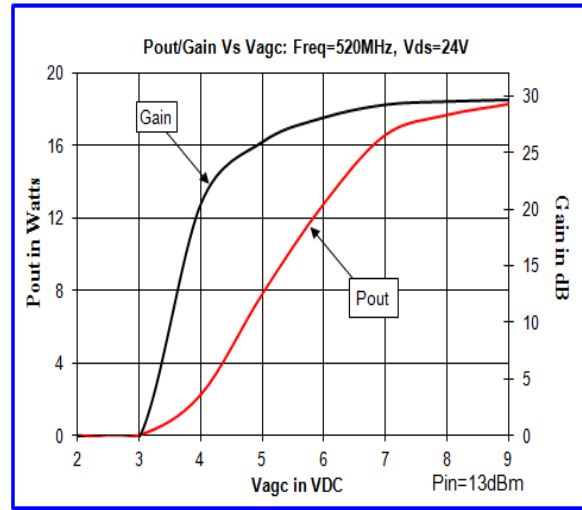
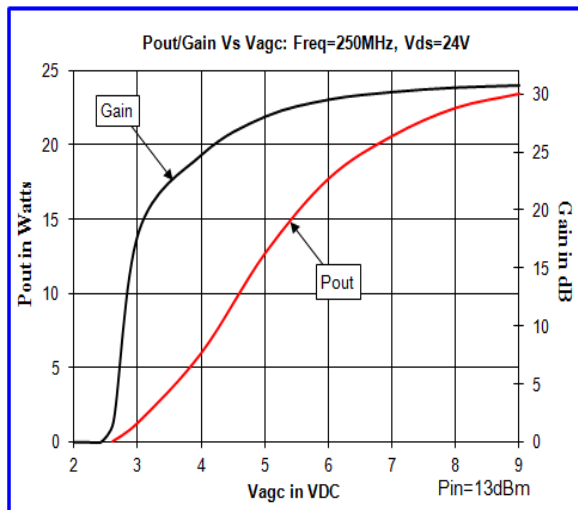
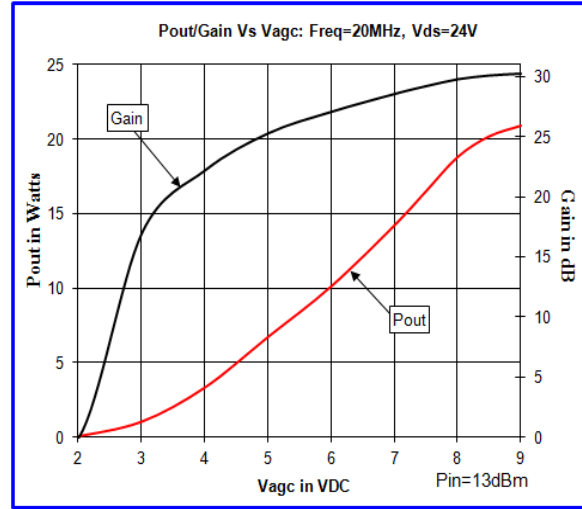
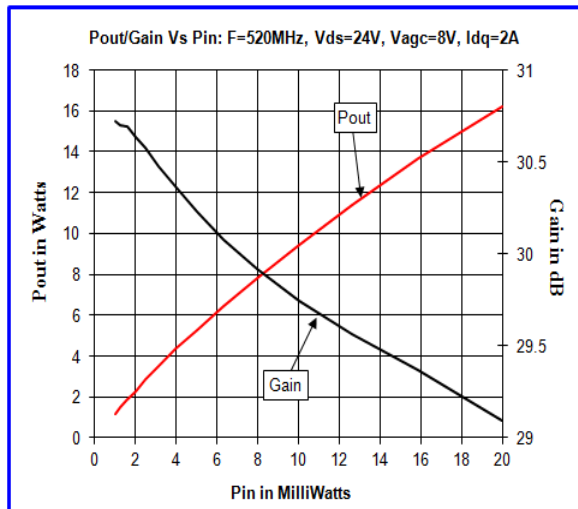
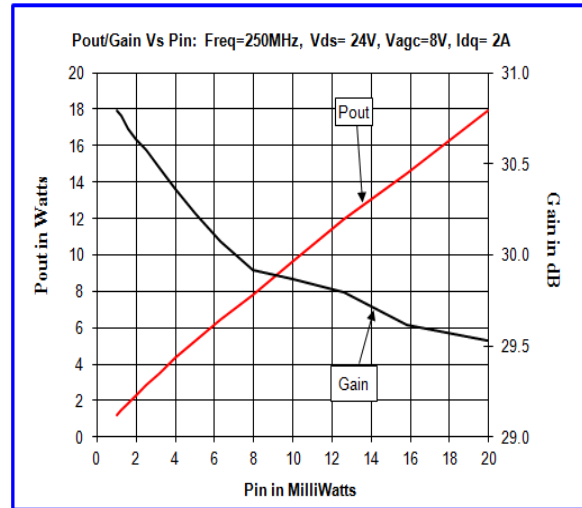
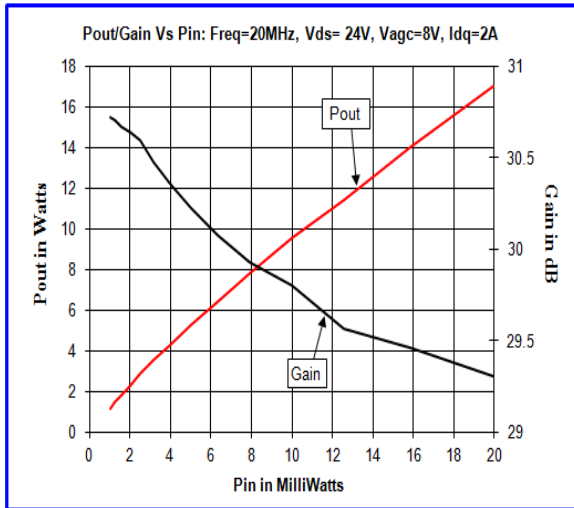
Pin 1=Ground Pin 4=Ground
 Pin 2=RF out Pin 5=VAGC
 Pin 3=Vdd Pin 6=RF in
 Pin 7=Ground



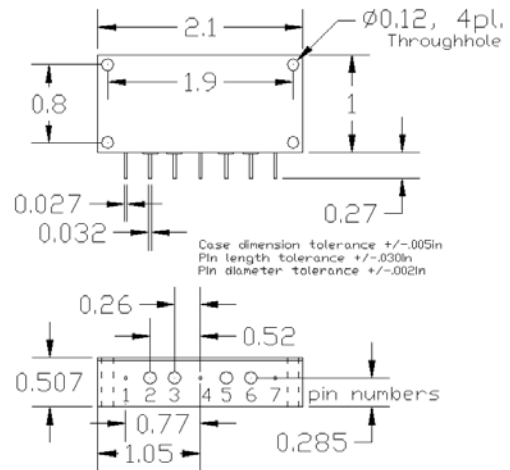
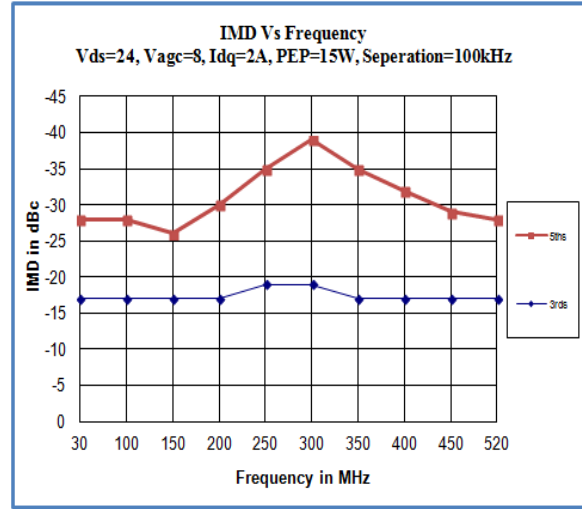
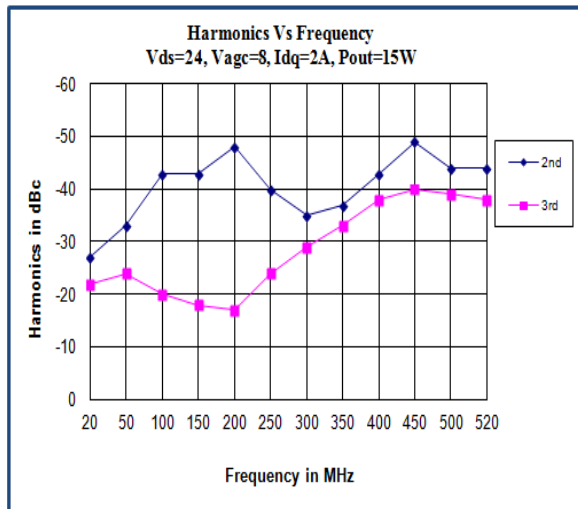
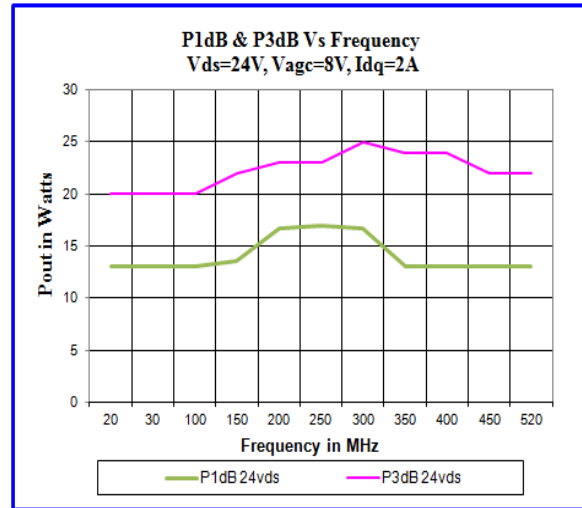
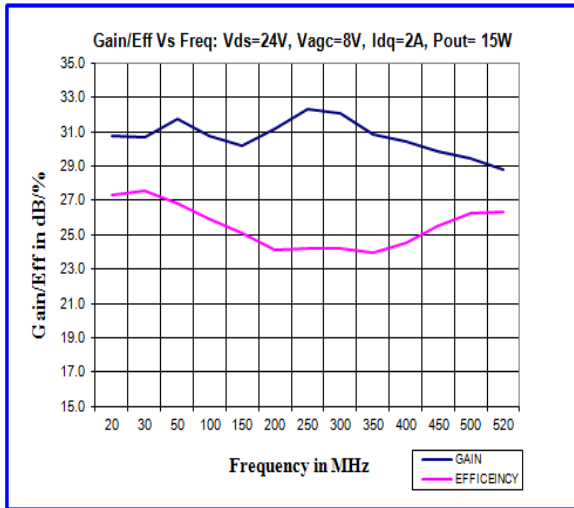
Electrical Characteristics: (T=25 °C Zs=Zl=50 ohms, Vdd = 24.0 Volts, Idq = 2.0 Amps)

Parameter	Symbol	Min	Typical	Max	Unit	Test Conditions
Frequency Range	BW	20.0		520	Mhz	50 ohm load
Output Power	Po	15.0			Watts	Pin = 13.0 dbm Vagc = 8.00 V
Power Gain	PG	27.0			dB	Pout = 15.0 Watts Vagc = 8.00 V
Total Efficiency	η	25			%	Pout = 15.0 Watts
2nd Harmonics	dso		-25.00		dBc	Pout = 15.0 Watts @ Mhz
Intermod - 2 tone	Im3		-15.00		dBc	AvePwr= 7.5 Watts
Load Mismatch Tolerance	VSWR	10:1			Relative	All Phase Angles Pout = 15.0 W
Vagc Voltage	VAGC			8.00	V	Pin = 13.0 dBm, Pout = 15.0 W
Pulse Response Time	Pr			20.0	uS	Pulse source: Vagc

MCCQ04



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POLYFET RF DEVICES

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