polyfet rf devices

MCCQ02

Power RF Amplifiers

Power = 15.0 Watts

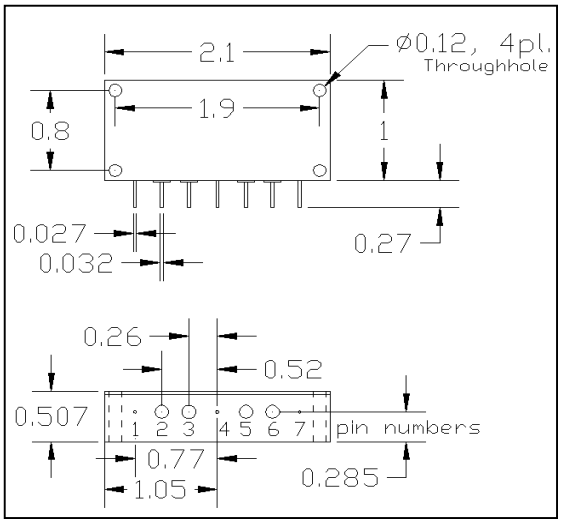
Bandwidth = 20 to 520 Mhz

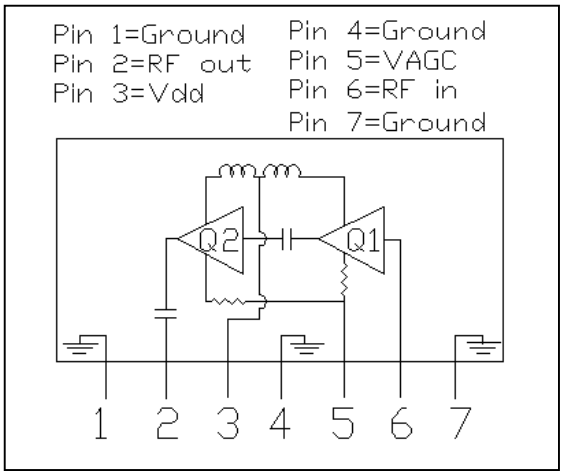
Gain = 27.0 dB Vdd = 25.0 Volts

50 ohms Input/Output Impedance

Description

The MCCQ02 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*	5.00	*mA*
Input Power	*Pin*	0.050	*W*
Output Power	*Pout*	20.0	*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 = 25.0 Volts, Idq = 2.2 Amps)

Parameter	*Symbol*	*Min*	*Typical*	*Max*	*Unit*	*Test Conditions*
Frequency Range	*BW*	20		520	*Mhz*	*50 ohm load*
Outut Power	*Po*	15.0			*Watts*	*Pin =* 13.0 *dbm* *Vagc =* 8.0 *V*
Power Gain	*PG*	27.0			*dB*	*Pout =* 15.0 *Watts* *Vagc =* 8.0 *V*
Total Efficiency	η	15			*%*	*Pout =* 15.0 *Watts*
2nd Harmonics	*dso*		-15.00		*dBc*	*Pout =* 15.0 *Watts @ Mhz*
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 =*15.0 *W*
Pulse Responese Time	*Pr*			4.0	*uS*	*Pulse source*: Vagc

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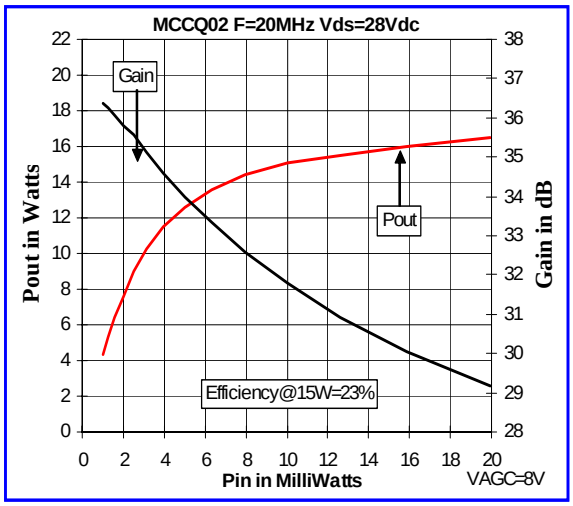
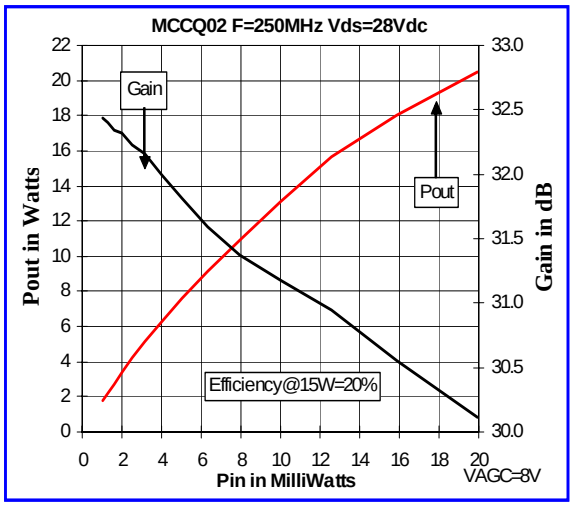
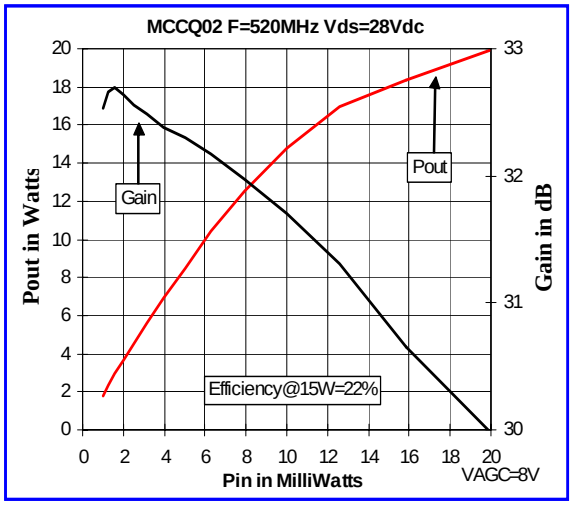
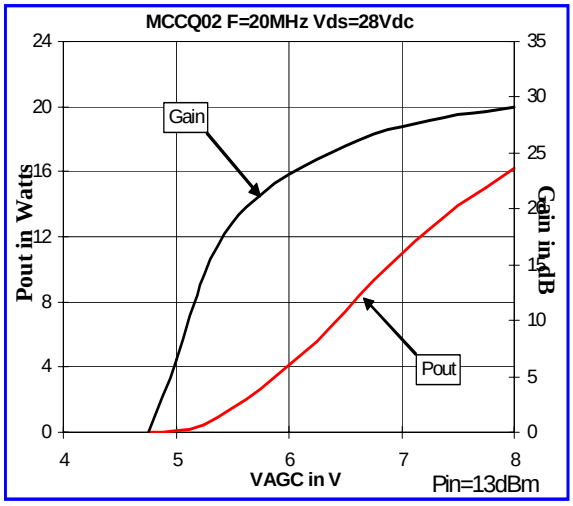
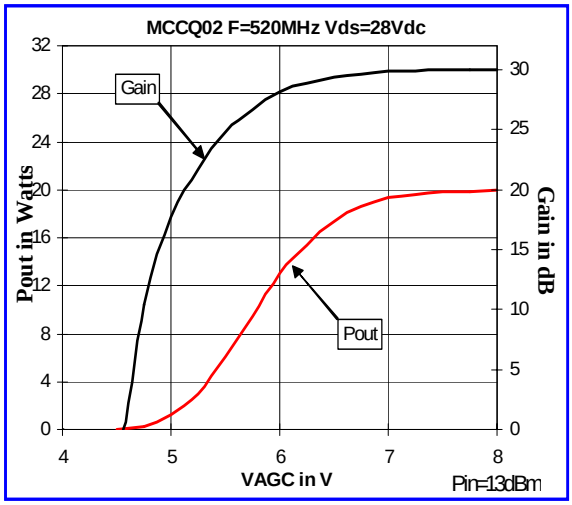
MCCQ02

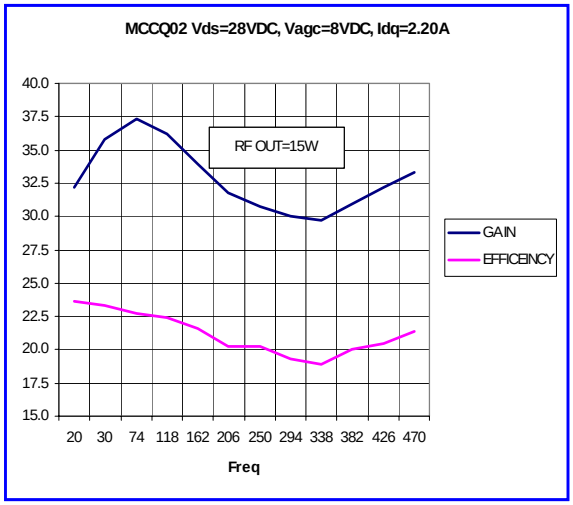












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