



Power RF Amplifiers

Power 20 Watts

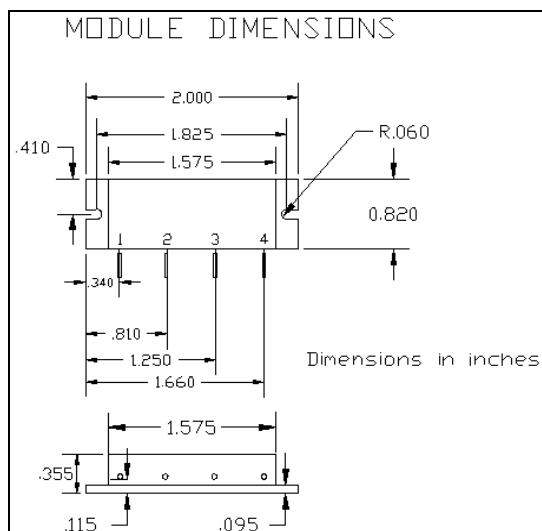
Bandwidth = 290 to 320 Mhz

Gain = 27 dB **Vdd** =12.5 Volts

50 ohms Input/Output Impedance

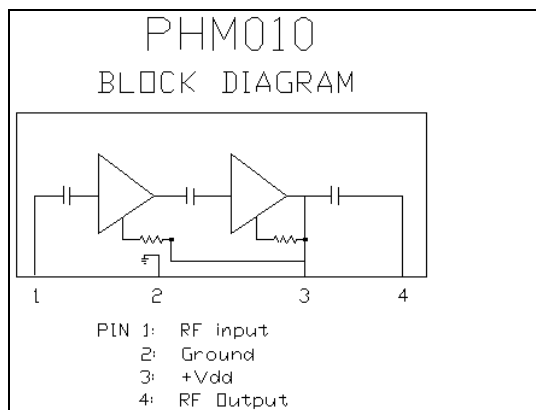
Description

The PHM010 is a two stage amplifier specifically designed military and commercial bandwidths. This amplifier can be used as a final stage for portable radio applications with output of 20Watts.



Absolute Maximum Ratings (T = 25 °C)

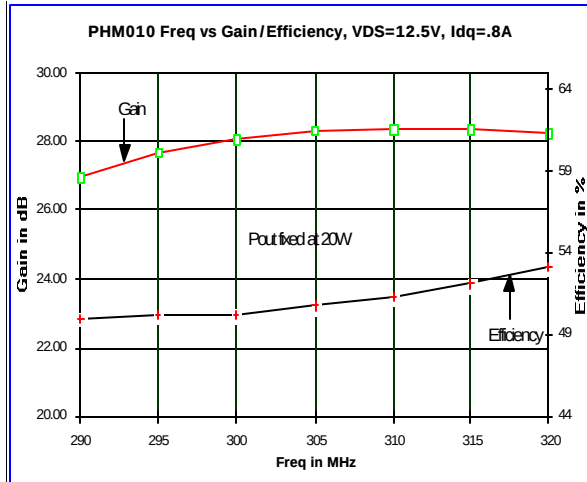
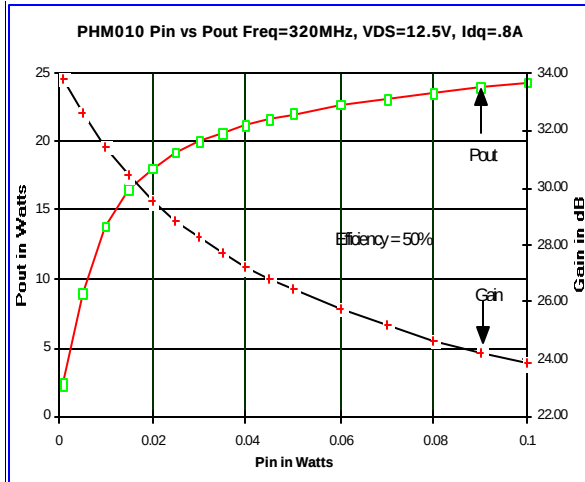
Parameter	Symbol	Value	Unit
DC supply Voltage 1	VDD1	17	V
DC supply Voltage 2	VDD2		V
Input Power	Pin	0.04	W
Output Power	Pout	27	W
Operating Case Temp.	Tc	-20 to +70	°C
Storage Temp.	Tstg	-30 to +100	°C



Electrical Characteristics: (T = 25 °C Zs=Zl=50 ohms. Vdd = 12.5 Volts)

Parameter	Symbol	Min	Typical	Max	Unit	Test Conditions
Frequency Range	BW	290		320	Mhz	50 ohm load
Output Power	Po	20			Watts	Idq = 0.8 Amps
Power Gain	PG	27			dB	@ Pout = 20 Watts
Total Efficiency	η	50			%	@ Pout = 20 Watts
2nd Harmonics	dso				dBc	@ Pout = 20 W. Freq = 305 Mhz
Intermod - 2 tone	Ip3				dBm	Freq = 305 Mhz
Load Mismatch Tolerance	VSWR	10:1			Relative	All Phase Angles
DC supply Voltage 2	VDD2				V	

PHM010



POLYFET RF DEVICES

Revision Date 7/20/99