



Power RF Amplifiers

Power = 20.0 Watts

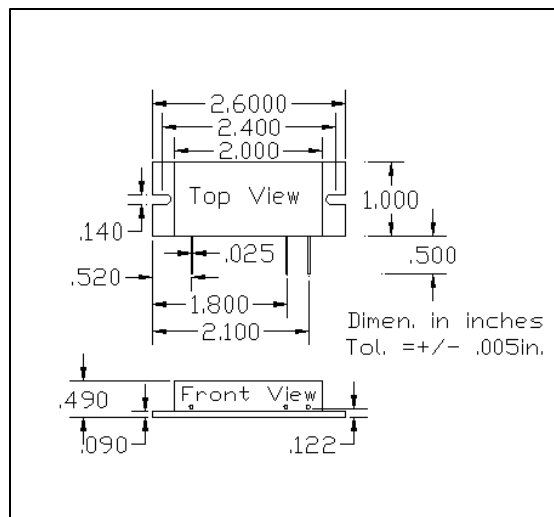
Bandwidth = 450 to 470 Mhz

Gain = 25.0 dB Vdd = 12.5 Volts

50 ohms Input/Output Impedance

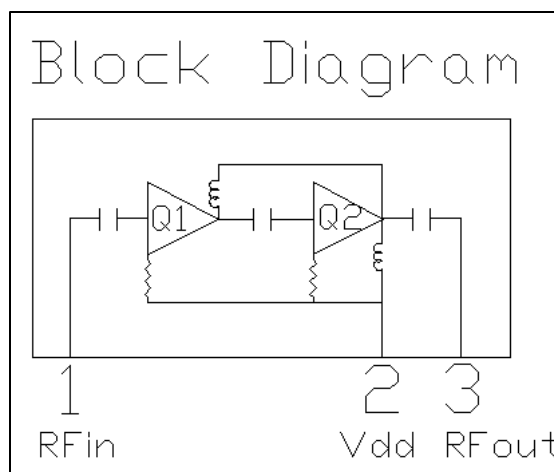
Description

The PHM014 20 Watt module series is available in bandwidths covering 380-512 Mhz. These dual stage amplifiers are specifically designed for Tetra and Land Mobile UHF band portable radio applications. External Gate bias pin option is available upon request.



Absolute Maximum Ratings (T=25 °C)

Parameter	Symbol	Value	Unit
DC supply Voltage 1	VDD1	17.0	V
DC supply Voltage 2	VDD2		V
Input Power	Pin	0.09	W
Output Power	Pout	27.0	W
Operating Case Temp.	Tc	-20 to +70	°C
Storage Temperature	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	450		470	Mhz	50 ohm load
Output Power	Po	20.0			Watts	Idq = 2.0 Amps
Power Gain	PG	25.0			dB	@ Pout = 20.0 Watts
Total Efficiency	h	40			%	@ Pout = 20.0 Watts
2nd Harmonics	dso		-40.00		dBc	@ Pout = 20.0 W. Freq = 460 Mhz
Intermod - 2 tone	Ip3	45.00			dBm	Freq = 460 Mhz; AvePwr= 4.0 W
Load Mismatch Tolerance	VSWR	10:1			Relative	All Phase Angles

PHM014-4

