



RF Power Module

Power = 100.0 Watts

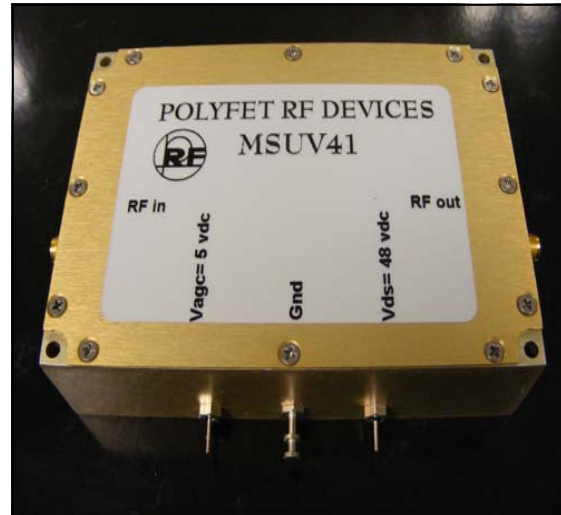
Bandwidth = 960 to 1260 Mhz

Gain = 13.0 dB Vdd = 48.0 Volts

50 ohms Input/Output Impedance

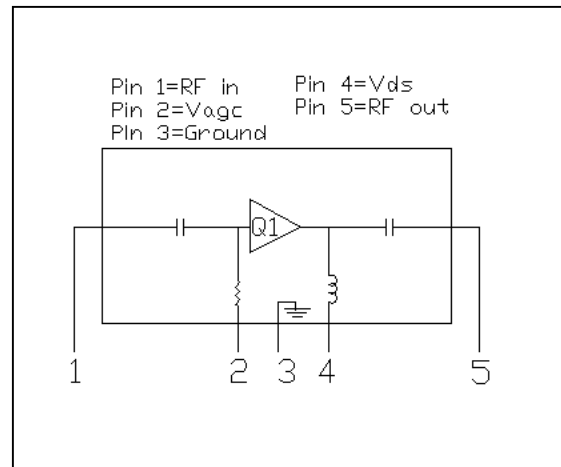
Description

The MSUV41 is a 100 Watt, GaN based, single stage amplifier module covering a bandwidth of 960-1260 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)

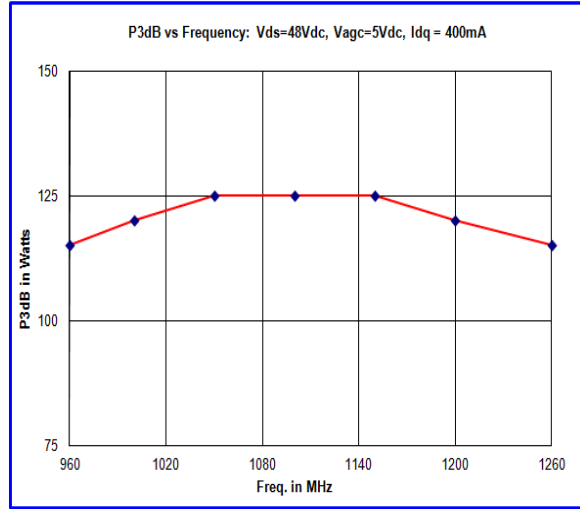
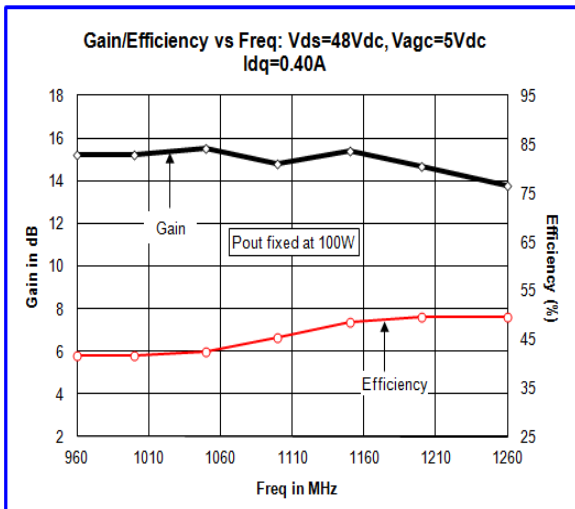
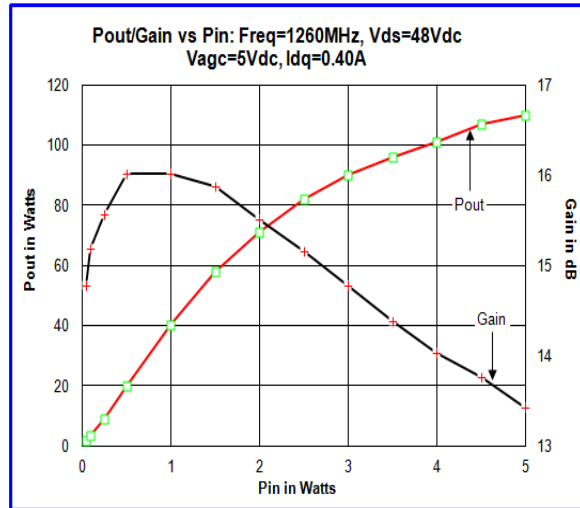
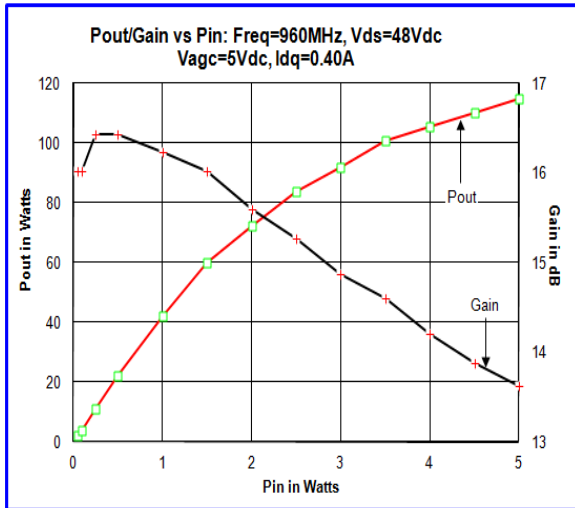
Parameter	Symbol	Value	Unit
DC supply Voltage 1	VDD1	52.0	V
DC supply Voltage 2	VDD2		V
AGC Voltage	VAGC	7.0	V
AGC Current	VAGCI	10.00	mA
Input Power	Pin	6.000	mW
Output Power	Pout	120.0	W
Operating Case Temp.	Tc	-40 to +85	°C
Storage Temperature	Tstg	-55 to +100	°C



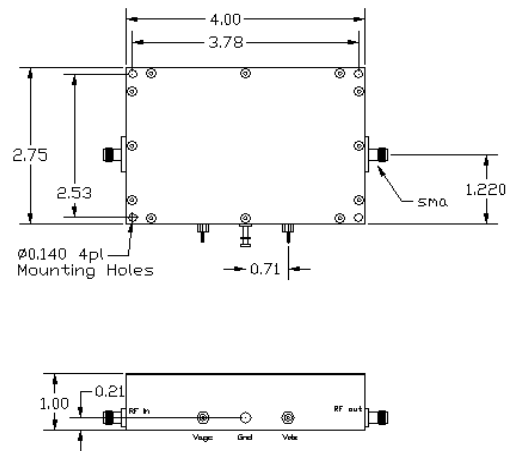
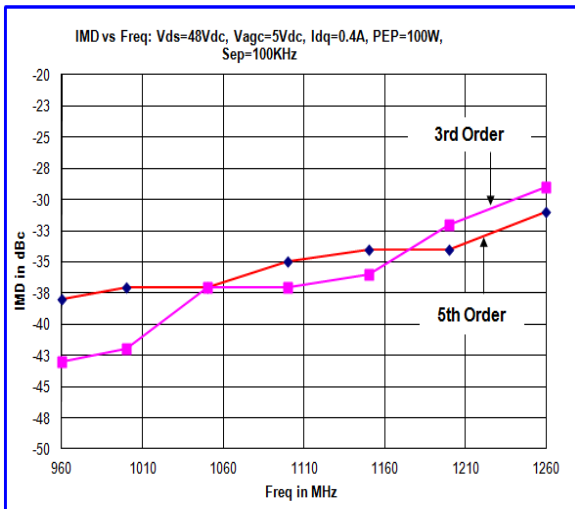
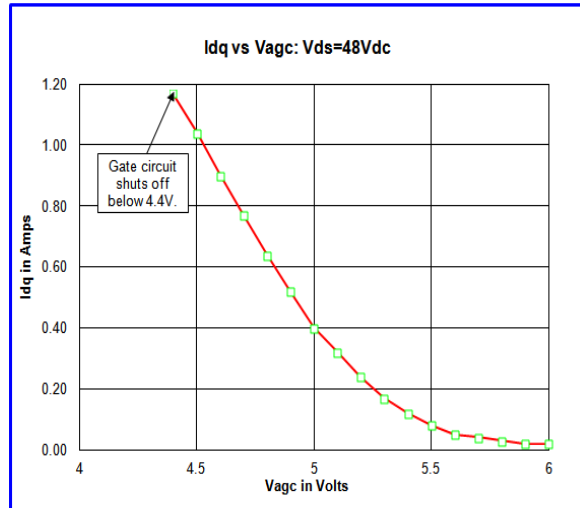
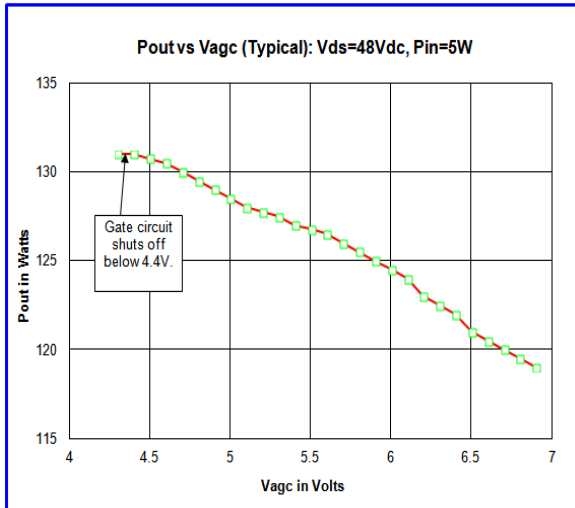
Electrical Characteristics: (T=25 °C Zs=Zl=50 ohms, Vdd = 48.0 Volts, Idq = 0.4 Amps)

Parameter	Symbol	Min	Typical	Max	Unit	Test Conditions
Frequency Range	BW	960		1260	Mhz	50 ohm load
Output Power	Po	100.0			Watts	Pin = 37.0 dbm Vagc = 5.00 V
Power Gain	PG	13.0			dB	Pout = 100.0 Watts Vagc = 5.00 V
Total Efficiency	η	40			%	Pout = 100.0 Watts
2nd Harmonics	dso				dBc	Pout = 0.0 Watts @ Mhz
Intermod - 2 tone	Im3	-25.00			dBc	AvePwr= 50.0 Watts
Load Mismatch Tolerance	VSWR	5:1			Relative	All Phase Angles Pout = 100.0 W
Vagc Voltage	VAGC			5.00	V	Pin = 37.0 dBm, Pout = 100.0 W
Pulse Response Time	Pr			1.0	uS	Pulse source: RF

MSUV41



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POLYFET RF DEVICES

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