



Power RF Amplifiers

Power = 15.0 Watts

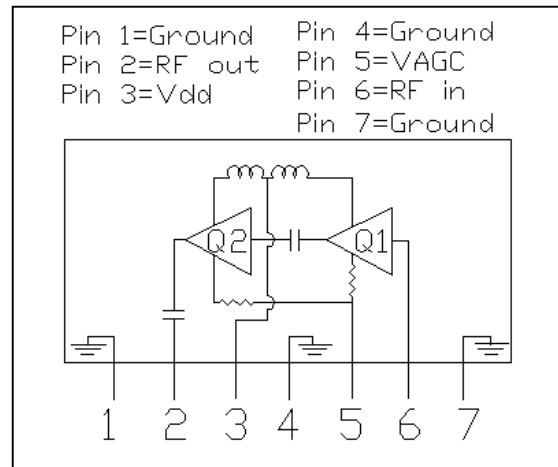
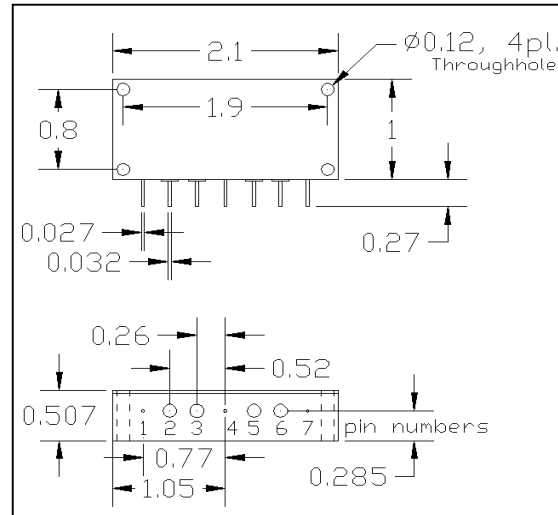
Bandwidth = 20 to 520 Mhz

Gain = 27.0 dB Vdd =25.0 Volts

50 ohms Input/Output Impedance

Description

The MCCQ03 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	0.05	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
Output 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 @ 30.0 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 Response Time	Pr				uS	DC Blank on Vagc pin

MCCQ03

