

RF MOSFET Amplifier Module 40 MHz-1220 MHz

AMP- 4010/03

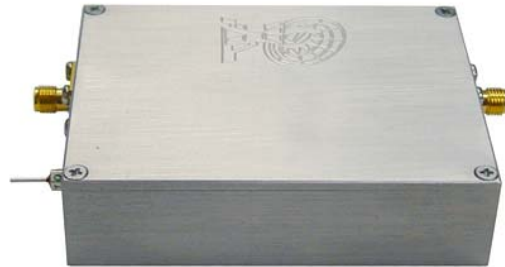
Power Output 0.3W

Features

- Wireless Data, Satellite Terminals, exciter for small digital transmitters DVB-T, COFDM

Applications

- PA Driver Amplifier
- Cellular, PCS, GSM, UMTS
- Wideband Instrumentation
- Wireless Data, Satellite Terminals



Electrical Characteristics (T_{case}=+25 °C, Z_G=Z_L=5W, unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TY P	MAX	UNIT
f	Frequency Range		40	-	860	MHz
P _{out}	Output Power	V _{DD} =24V, P _{in} =0dBm	0.5	-	0.6	W
τ	Total Efficiency	P _{out} =0.3W (V _{GG} control), V _{DD} =24V, P _{in} =0dBm	38	-	-	%
2f _o	2 nd Harmonic		-	-	-19	dBc
in	Input VSWR		-	-	4:1	—
S/N	Noise		4	-	5.5	dB
—	Stability	V _{DD} =24V, P _{in} =1mW P _{out} <0.5W	No parasitic oscillation			—
—	Load VSWR Tolerance	V _{DD} =24V, P _{in} =1mW, P _{out} =0.5W	No degradation or destroy			—

Nominal Operating Parameters

Parameter	Specification			Unit	Condition
	Min	Typ	Max		
General Performance					$V_+ = 24V$; $T_{MB} = 30^{\circ}C$; $Z_S = Z_L = 75\Omega$
Power Gain		27.0		dB	f = 45MHz
	28.0	28.5	29.5	dB	f = 1218MHz
Slope ^[1]	1.0	1.5	2.5	dB	f = 45MHz to 1218MHz
Flatness of Frequency Response			0.8	dB	f = 45MHz to 1218MHz
Input Return Loss	-20			dB	f = 45MHz to 320MHz
	-19			dB	f = 320MHz to 640MHz
	-18			dB	f = 640MHz to 870MHz
	-17			dB	f = 870MHz to 1000MHz
	-16			dB	f = 1000MHz to 1218MHz
Output Return Loss	-20			dB	f = 45MHz to 320MHz
	-19			dB	f = 320MHz to 640MHz
	-18			dB	f = 640MHz to 870MHz
	-17			dB	f = 870MHz to 1000MHz
	-16			dB	f = 1000MHz to 1218MHz
Noise Figure		4.6	5.5	dB	f = 50MHz to 1218MHz