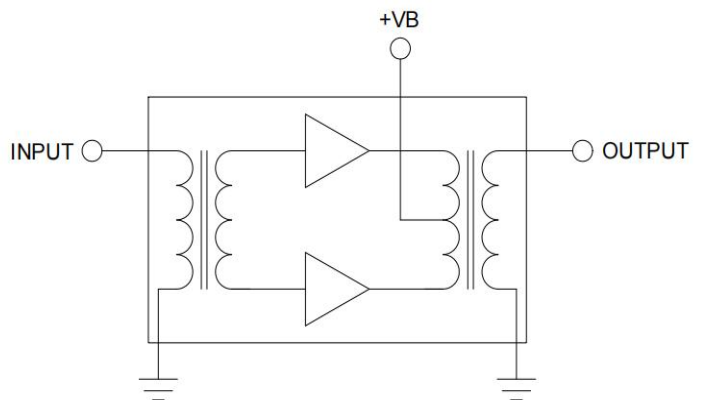




The SMG1234 is a Hybrid Push Pull amplifier module. The part employs GaAs dies and is operated from 50MHz to 1218MHz with supply voltage +24V(DC). It provides excellent linearity and superior return loss performance with low noise and optimal reliability.

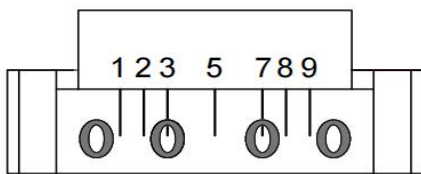
FEATURES

- Excellent Linearity
- Superior Return Loss Performance
- Extremely Low Distortion
- Optimal Reliability
- Low Noise
- Unconditionally Stable Under All Terminations
- Power gain @34dB
- 320mA Max. at 24VDC



OUTLINE

PIN CONFIGURATION



side view

Pin	Description
1	Input
5	+V _B
9	Output
2、3、7、8	GND

QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNITS
G _p	Power Gain	f=50 MHz	33.5	34.5	dB
I _{tot}	Total current consumption(DC)	V _B =24V	280	320	mA

LIMITING VALUES

In accordance with the Absolute Maximum Rating System

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _i	RF input voltage	-	70	dBmV
T _{stg}	Storage temperature	-40	+100	°C
T _{mb}	Operating mounting base temperature	-30	+100	°C

CHARACTERISTICS

(Bandwidth 50 to 1218MHz ; T_{mb} =25°C , V_B =24V, Z_S =Z_L =75Ω)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNIT	CONDITIONS
G _p	Power Gain	33.5	34	34.5	dB	f=50MHz
G _p	Power Gain	-	35	-	dB	f=870MHz
G _p	Power Gain	34.5	35.0	36	dB	f=1218MHz
SL	Slope cable equivalent	0.5	1.0	2.0	dB	f=50 to 1218 MHz
FL	Flatness of frequency response	-	-	±1.0	dB	f=50 to 1218 MHz
S ₁₁ & S ₂₂	Input & Output Return Loss	-	-	-17	dB	f=50 to 1000 MHz
S ₁₁ & S ₂₂	Input&Output Return Loss	-	-	-15	dB	f=1000 to 1218MHz
CTB	Composite Triple Beat	-	-65	-62	dB	Vo=45dBmV
CSO	Composite Second Order distortion	-	-65	-62	dB	At 862MHz,flat,98 Analog Channe
X _{mod}	Cross Modulation	-	-62	-	dB	
F	Noise Figure	-	4.5	5.0	dB	f=50 to 1218 MHz
I _{tot}	Total Current Consumption	280	300	320	mA	V _B =+24V

The module normally operates at V_B=24 V(±0.5)

MODULE DIMENSIONS

