

FEATURES

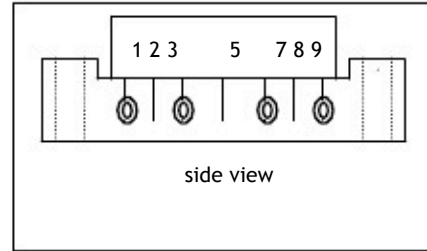
- GaAs active devices
- Power gain @30dB
- Low distortion
- Excellent linear gain
- Low noise figure
- High reliability
- Low cost

DESCRIPTION

The SMG1030DM is a GaAs hybrid power double amplifier module. The part employs GaAs dies and is operated from 50MHz to 1003MHz with supply voltage +24V(DC)

OUTLINE

PIN CONFIGURATION



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	29.5	30.5	dB
I _{tot}	Total current consumption(DC)	V _B =24V	350	400	mA

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LIMITING VALUES

In accordance with the Absolute Maximum Rating System

SYMBOL	PARAMETER	MIN.	MAX.	UNITS
V _i	RF input voltage	-	55	dBmV
T _{stg}	Storage temperature	-40	+100	□
T _{mb}	Operating mounting base temperature	-20	+90	□

CHARACTERISTICS

(Bandwidth 50 to 1003MHz; T_{mb}=25□, V_B=24V, Z_s=Z_L=75Ω)

SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
G _p	Power Gain	dB	29.5	30.0	30.5	f=50MHZ
G _p	Power Gain	dB	30.5	31.0	31.5	f=1003MHZ
SL	Slope cable equivalent	dB	0	2	2.5	f=50 to 1003MHZ
FL	Flatness of frequency response	dB	-	-	±0.5	f=50 to 1003 MHZ
S11 & S22	Input & output return loss	dB	-	-	-16	f=50 to 1003 MHZ
CTB	Composite Triple Beat	dB	-	-	62	PAL 42 title 18dB to 1003MHz;
CSO	Composite Second Order distortion	dB	-	-	62	V _o =60dBmV;
X _{mod}	Cross Modulation	dB	-	-	56	CTB measured at 543.25 MHz; CSO measured at 544.5 MHz;
F	Noise Figure	dB	-	5.0	6.2	f=1003 MHZ
I _{tot}	Total Current Consumption	mA	350		400	V _B =+24V

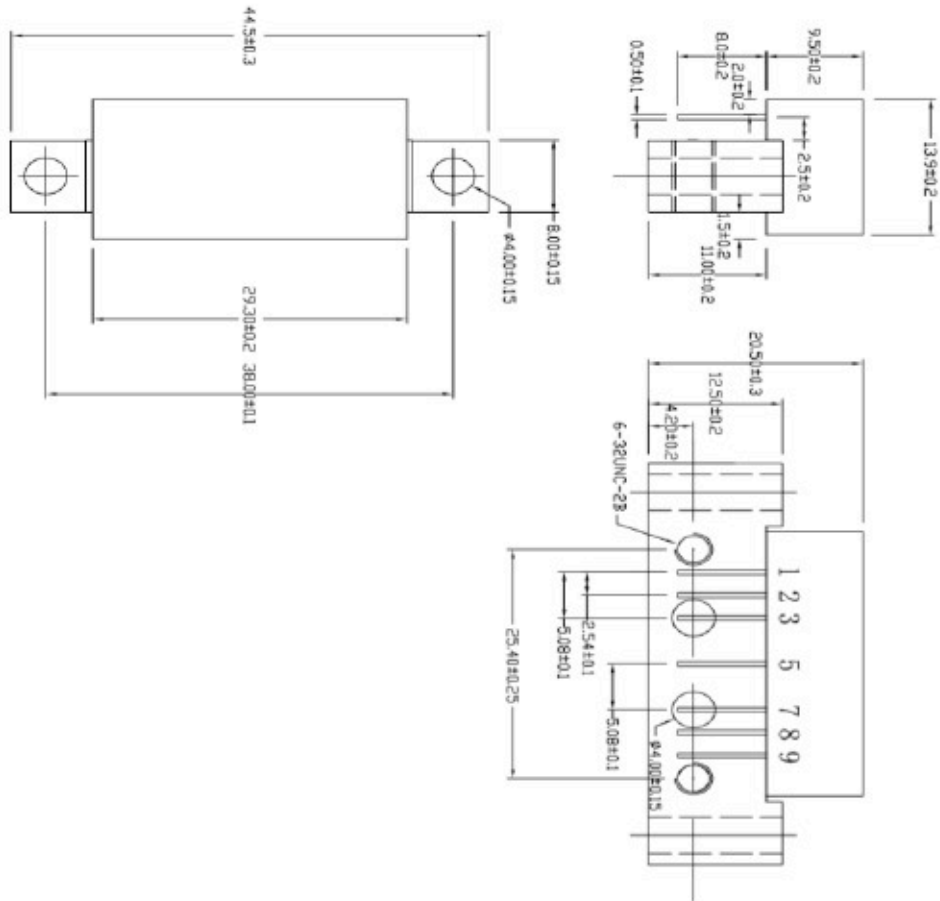
The module normally operates at V_B=24 V(±0.5),

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MODULE DIMENSIONS



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