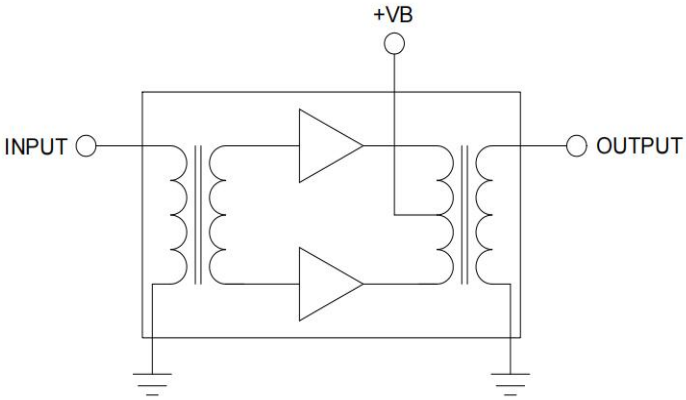
The SMG3252R is a Hybrid Reverse amplifier module.The part employs Si dies and is operated from 5MHz to 300MHz with supply voltage +24V(DC). It provides excellent linearity and superior return loss performance with low noise and optimal reliability.

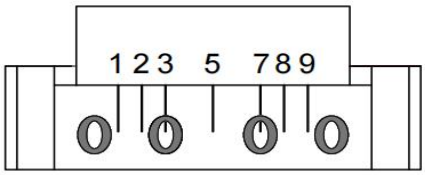
FEATURES

- Excellent Linearity
- Superior Return Loss Performance
- Extremely Low Distortion
- Optimal Reliability
- Low Noise
- Unconditionally Stable Under All Terminations
- Power gain @25dB
- 160mA 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=10 MHz	24.5	25.5	dB
I_{tot}	Total current consumption(DC)	V_B=24V	130	160	mA

LIMITING VALUES

In accordance with the Absolute Maximum Rating System

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_i	RF input voltage	-	65	dBmV
T_{stg}	Storage temperature	-40	+100	℃
T_{mb}	Operating mounting base temperature	-20	+90	℃

CHARACTERISTICS

(Bandwidth 5 to 300MHZ; Tmb =25℃, VB =24V, ZS =ZL =75Ω)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNIT	CONDITIONS
G_p	Power Gain	24.5	-	25.5	dB	f=10MHz
SL	Slope cable equivalent	-0.2	-	+0.5	dB	f=5 to 300MHz
FL	Flatness of frequency response	-	-	±0.5	dB	f=5to 300MHz
S_{11}	Input Return Loss	-	-	-18	dB	f=5 to 10MHz
S_{11}	Input Return Loss	-	-	-20	dB	f=10 to 300MHz
S_{22}	Output Return Loss	-	-	-18	dB	f=5 to 10MHz
S_{22}	Output Return Loss	-	-	-20	dB	f=10 to 300MHz
CTB	Composite Triple Beat	-	-	-66	dB	17channels flat; Vo=50dBmV; CTB measured at 77.25 MHz CSO measured at 78.5 MHz;
CSO	Composite Second Order distortion	-	-	-65	dB	
X_{mod}	Cross Modulation	-	-	-55	dB	
F	Noise Figure	-	4.3	-	dB	f=300 MHz
I_{tot}	Total Current Consumption	130	160		mA	V_B=+24V

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

MODULE DIMENSIONS