

RF AMPLIFIER

MODEL TR9169

Available as: TR9169, 4 Pin TO-8B (T8)
 RN9169, 4 Pin Surface Mount (SM19)
 BR9169, Connectorized Housing (H2)

Features

- High IP3: +34 dBm Typical
- Higher Output Power: +21 dBm Typical
- High Gain: 26 dB Typical
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 1000 MHz	10 - 1000 MHz
Gain (dB)	26	25 Min.
Power @ 1 dB Comp. (dBm)	+21	+20.0 Min.
Reverse Isolation (dB)	-36	-35 Max.
VSWR In	1.7:1	2.0:1 Max.
Out	1.7:1	2.0:1 Max.
Noise figure (dB)	3.5	4.0 Max.
Power Vdc	+15	+15
mA	125	135 Max.

Note: Care should always be taken to effectively ground the case of each unit.

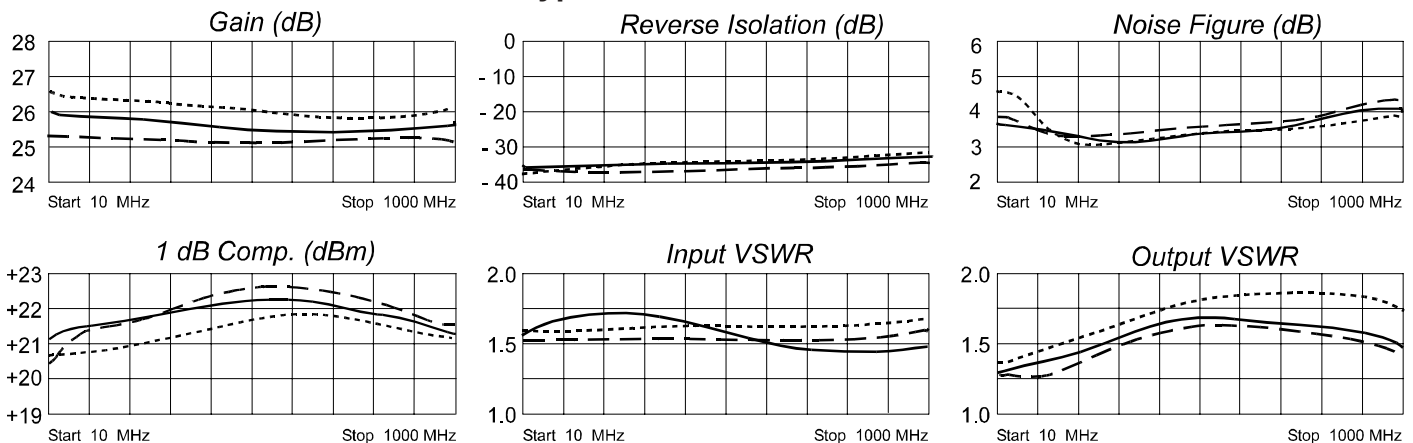
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.....+55 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+48 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+34 dBm (Typ.)

Absolute Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Operating Case Temperature + 125 °C
 DC Voltage + 17 Volts
 Continuous RF Input Power.....+13 dBm
 Short Term RF input Power.....50 Milliwatts (1 minute Max.)
 Maximum Peak power.....0.5 Watts (3 μsec Max.)

Typical Performance Data



Legend ——— + 25 °C - - - + 85 °C -55 °C

Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
10	.13	168	19.51	5	.01	5	.12	162
100	.14	179	19.49	- 28	.01	- 5	.14	180
200	.16	176	19.51	- 58	.01	- 9	.17	173
400	.20	158	19.52	-114	.01	- 21	.24	140
600	.21	132	19.22	-170	.01	- 32	.26	97
800	.18	101	18.92	131	.01	- 50	.23	42
1000	.11	77	19.36	76	.01	- 65	.18	- 26



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Rev.
2/22/07

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