

RF AMPLIFIER

MODEL TM9529

Available as: TM9529, 4 Pin TO8 (T4)
 TN9529, 4 Pin Surface Mount (SM3)
 BX9529, SMA Connectorized Housing (H1)

Features

- High Output Power: +20 dBm Typical
- High IP3: +39 dBm Typical
- Operating Temperature: -55°C to + 85 °C

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+53 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+48 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+39 dBm (Typ.)

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 1500 MHz	10 - 1500 MHz
Gain (dB)	9.5	8.5 Min.
Power @ 1 dB Comp. (dBm)	+20.0	+19.0 Min.
Reverse Isolation (dB)	-16	-15 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	*4.0	*8.0 Max.
Power Vdc	+12	+12
mA	90	95 Max.

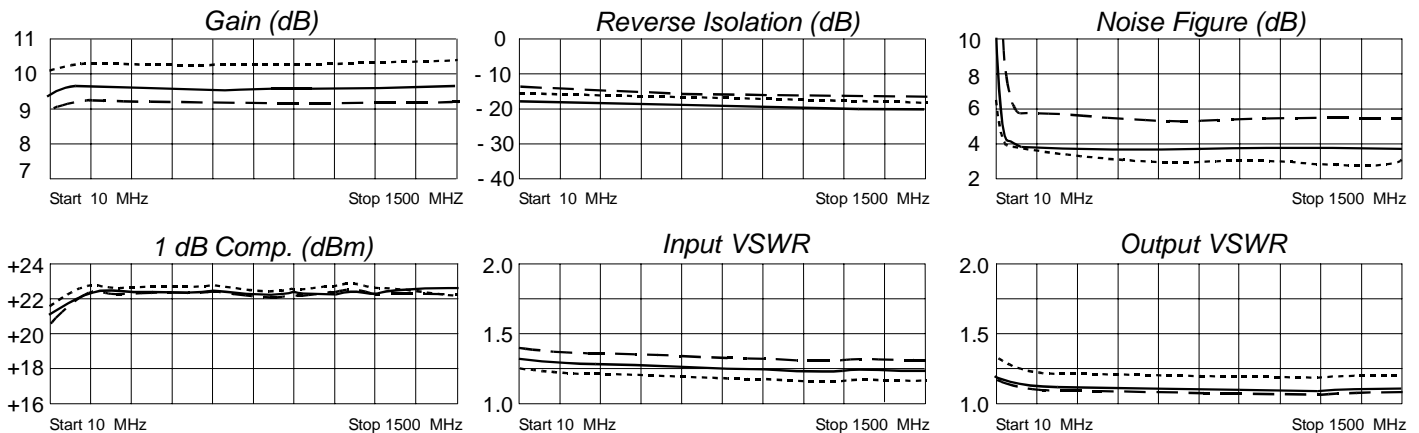
Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 15 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power 200 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

* NOISE FIGURE IS HIGHER FOR FREQUENCIES BELOW 50 MHZ

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

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	-30	3.02	-172	.135	6	.16	165
100	.09	-14	3.20	175	.142	- 4	.11	168
200	.09	-21	3.18	169	.141	- 8	.10	163
400	.08	-38	3.18	157	.142	- 15	.10	149
600	.08	-55	3.17	145	.141	- 25	.10	138
800	.08	-71	3.16	134	.138	- 33	.10	129
1000	.07	-94	3.19	122	.135	- 43	.10	124
1200	.08	-107	3.20	110	.132	- 51	.09	107
1500	.08	-136	3.26	92	.131	- 64	.10	- 88



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