

# RF AMPLIFIER

## MODEL *TM9269*

Available as: TM9269, 4 Pin TO-8 (T4)  
 TN9269, 4 Pin Surface Mount (SM3)  
 FP9269, 4 Pin Flatpack (FP4)  
 BX9269, Connectorized Housing (H1)

### Features

- High Gain: 22 dB Typical
- High Output Power: +21 dBm Typical

### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+56 dBm (Typ.)  
 Second Order Two Tone Intercept Point.....+50 dBm (Typ.)  
 Third Order Two Tone Intercept Point.....+35 dBm (Typ.)

### Specifications

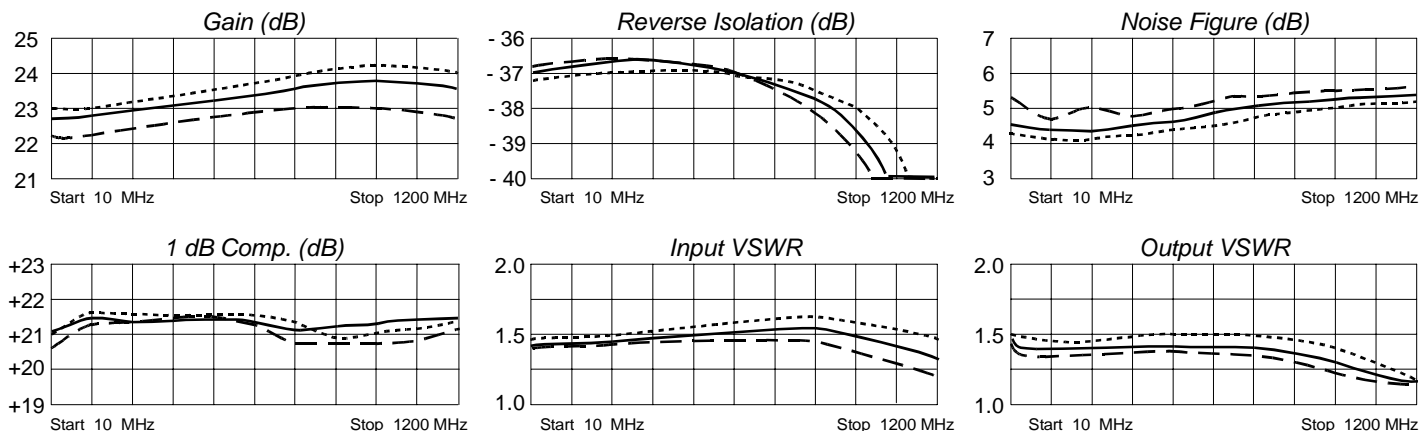
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5-1300 MHz	10-1200 MHz
Gain (dB)	22	20 Min.
Power @ 1 dB Comp. (dBm)	+21	+20 Min.
Reverse Isolation (dB)	-36	-35 Max.
VSWR In	1.7:1	2:1 Max.
Out	1.7:1	2:1 Max.
Noise Figure (dB)	4.5	6.0 Max.
Power Vdc	+15	+15
mA	130	140 Max.

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

### Maximum Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
 Storage Temperature ..... -62°C to + 125 °C  
 Case Temperature ..... + 125 °C  
 DC Voltage ..... + 17 Volts  
 Continuous RF Input Power ..... + 10 dBm  
 Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 Watt (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	164	13.75	14	.0142	9	.21	160
100	.13	177	13.74	- 16	.0145	5	.19	169
200	.14	173	13.81	- 35	.0161	12	.19	162
300	.15	167	14.05	- 54	.0165	11	.19	154
400	.16	158	14.17	- 73	.0154	10	.20	145
500	.17	147	14.46	- 92	.0153	12	.20	132
600	.18	134	14.56	-112	.0147	7	.21	119
700	.18	118	14.70	-131	.0137	12	.22	102
800	.17	99	14.82	-152	.0156	15	.21	83
900	.17	78	14.65	-174	.0178	2	.21	62
1000	.16	50	14.53	165	.0143	11	.22	35
1100	.15	14	14.05	143	.0133	18	.22	10
1200	.18	-26	13.70	121	.0104	14	.22	-21



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