

RF AMPLIFIER

MODEL **TM9157**

Available as: TM9157, 4 Pin TO-8 (T4)
 TN9157, 4 Pin Surface Mount (SM3)
 FP9157, 4 Pin Flatpack (FP4)
 BX9157, Connectorized Housing (H1)

Features

- .3 to 1000 MHz
- Low VSWR: < 1.5:1 Typ.
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	0.3 - 1000 MHz	0.3 to 1000 MHz
Gain (dB)	10.2	8.5 Min.
Power @ 1 dB Comp. (dBm)	+14	+13 Min.
Reverse Isolation (dB)	-18	-15 Max.
VSWR In	<1.2:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	4.5	6.0 Max.
Power Vdc	+15	+15 Max.
mA	44	48 Max.

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

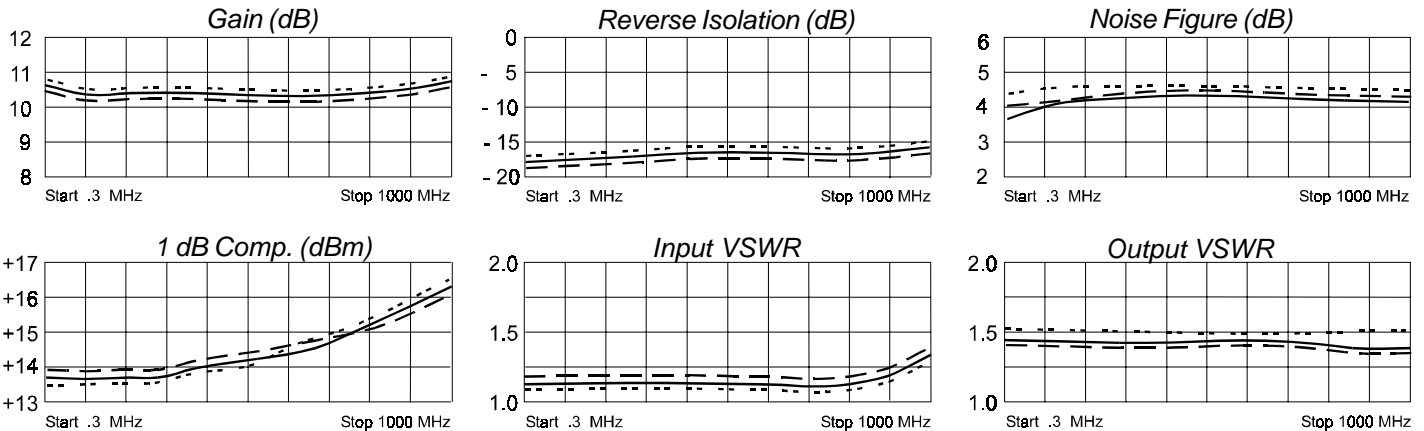
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point+43 (Typ.)
 Second Order Two Tone Intercept Point+37 (Typ.)
 Third Order Two Tone Intercept Point+27 (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 18 Volts
 Continuous RF Input Power + 13 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
3	.02	- 2	3.45	-178	.13	3	.19	-158
5	.05	2	3.36	179	.13	- 0	.20	-179
50	.05	0	3.35	173	.13	- 1	.20	177
100	.05	- 5	3.33	166	.13	- 1	.20	176
200	.05	- 10	3.32	152	.13	- 4	.19	172
400	.06	- 34	3.32	125	.13	- 8	.19	169
600	.07	- 73	3.35	97	.14	-13	.18	168
800	.09	-121	3.42	68	.15	-21	.19	164
1000	.15	-171	3.50	36	.16	-28	.18	158



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