

RF AMPLIFIER

MODEL TR9190

Available as: TR9190, 4 Pin TO-8B (T8)
 RN9190, 4 Pin Surface Mount (SM19)
 BR9190, Connectorized Housing (H2)

Features

- High Output Power: 25.5 dBm Typical
- High Gain: 23 dB Typical
- 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	10 - 400 MHz	10 - 400 MHz
Gain (dB)	23	22 Min.
Power @ 1 dB Comp. (dBm)	+25.5	+24.5 Min.
Reverse Isolation (dB)	-32	-31 Max.
VSWR In	1.8:1	2.0:1 Max.
Out	1.8:1	2.0:1 Max.
Noise figure (dB)	5.0	6.0 Max.
Power Vdc	+12	+12
mA	205	220 Max.

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

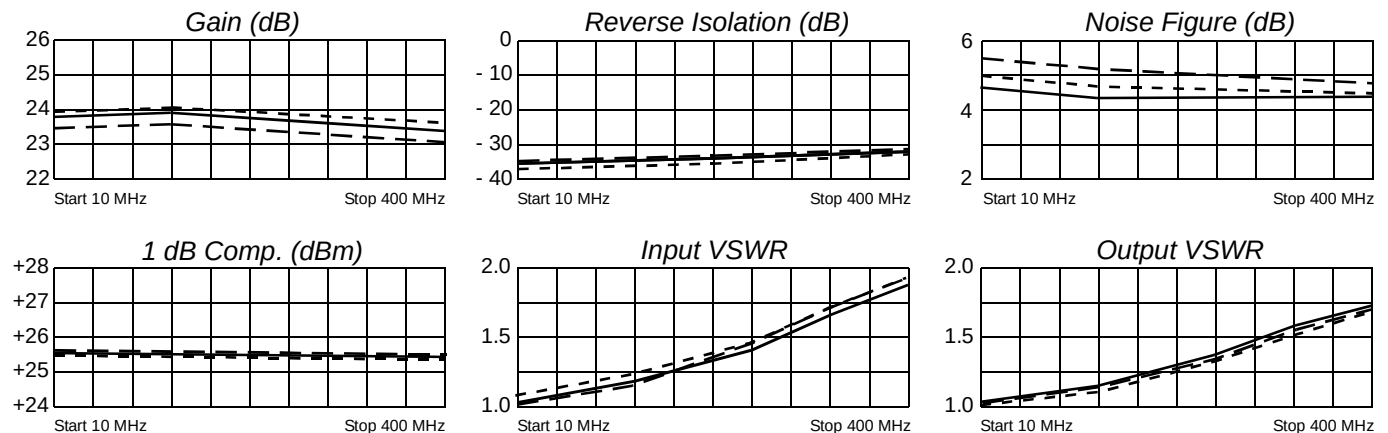
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +50 dBm (Typ.)
 Second Order Two Tone Intercept Point +45 dBm (Typ.)
 Third Order Two Tone Intercept Point +35 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 95 °C
 DC Voltage + 15 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----- Mag. Deg.	----- S21----- Mag. Deg.	----- S12----- Mag. Deg.	----- S22----- Mag. Deg.
10	.09 -167	15.77 3	.0165 5	.10 -110
100	.10 -170	15.75 -51	.0172 -11	.06 -135
200	.15 -167	15.56 -102	.0184 -21	.12 -152
300	.20 -178	15.26 -155	.0200 -36	.19 -176
400	.26 -162	14.72 -152	.0218 -50	.27 -154



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