

RF AMPLIFIER

MODEL TR6535

Available as: TR6535, 4 Pin TO-8B
 RN6535, 4 Pin Surface Mount
 BR6535, SMA Connectorized Surface Mount

Features

- High Gain: 32.5 dB Typical
- Low Noise Figure: 1.8 dB Typical
- High Output Power: +22 dBm Typical

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 400 MHz	10 - 400 MHz
Gain (dB)	32.5	30.0 Min.
Power @ 1 dB Comp. (dBm)	+22	+20.0 Min.
Reverse Isolation (dB)	-36	-35 Max.
VSWR In	1.75:1	2.5:1 Max.
VSWR Out	1.5:1	2.5:1 Max.
Noise figure (dB)	1.8	3.0 Max.
Power Vdc	+15	+15
mA	90	100 Max.

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

Typical Intermodulation Performance at 25 ° C

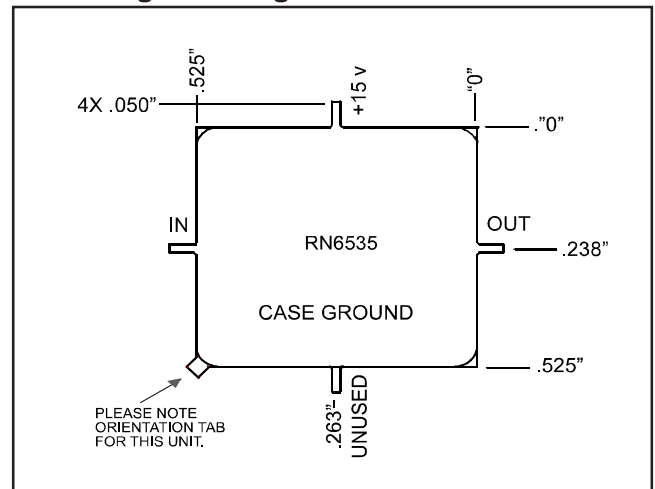
Second Order Harmonic Intercept Point +54 dBm (Typ.)
 Second Order Two Tone Intercept Point +48 dBm (Typ.)
 Third Order Two Tone Intercept Point +37 dBm (Typ.)

Revision 7/7/2011

Maximum Ratings

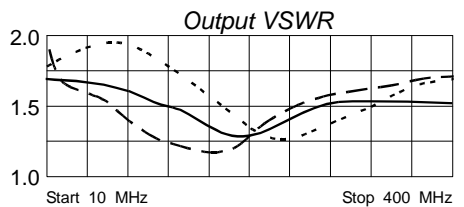
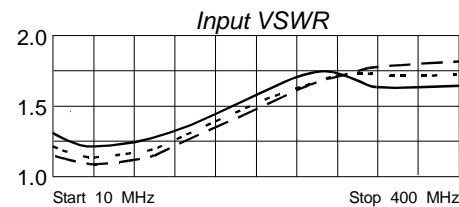
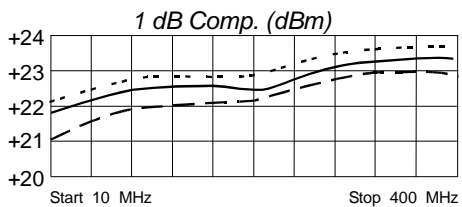
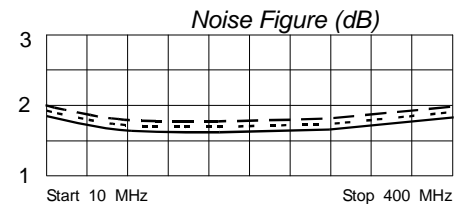
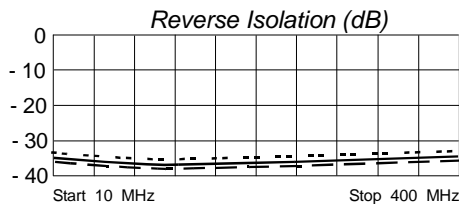
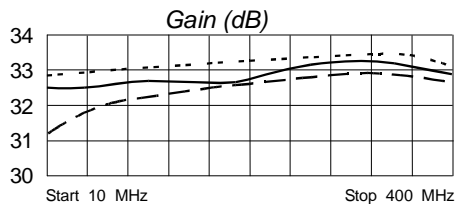
Ambient Operating Temperature -55°C to +100 °C
 Storage Temperature -62°C to +125 °C
 Case Temperature +125 °C
 DC Voltage +18 Volts
 Continuous RF Input Power +20 dBm
 Short Term RF Input Power ... 200 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 μsec Max.)

Package Drawing For the RN6535 Version*



*Please note the Pinouts for this RN6535 design.

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	.11	-117	42.18	12	.01	13	.26	5
50	.07	-154	42.28	-22	.01	-18	.23	-23
100	.06	-136	42.36	-49	.01	-51	.17	-51
200	.18	-134	42.67	-101	.01	-121	.01	-21
300	.24	-167	42.80	-156	.01	-164	.14	-3
400	.25	-178	40.98	142	.02	139	.17	-123



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