

RF Amplifier

Low Noise: 1.5 dB

Model TR9757

1700 to 2400 MHz

Features

- Low Noise Figure: 1.5 dB Typical
- Low 5 Volt Operation
- 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	1700-2400MHz	1700-2400MHz
Gain (dB)	23	22 Min.
Power @ 1 dB Comp. (dBm)	+15	+14 Min.
Reverse Isolation (dB)	-33	-32 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	1.5	2.2 Max.
Power Vdc	+5	+5
mA	60	64 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..... +46 dBm (Typ.)
 Second Order Two Tone Intercept Point..... +40 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+26 dBm (Typ.)

Maximum Ratings

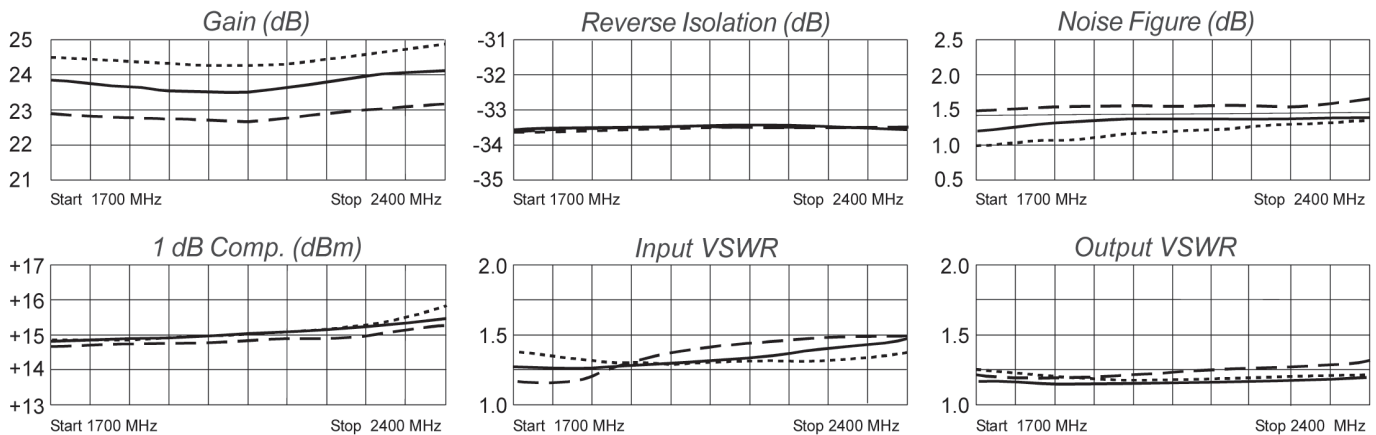
Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage +8 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power... 200 Milliwatts (1 Minute Max.)
 Maximum Peak Power..... 0.5 Watt (3 µsec Max.)

Packaging Options (see Appendix)

TR9757, 4 Pin TO-8B (T8)
 RN9757, 4 Pin Surface Mount (SM19)
 BR9757, Connectorized Housing (H2)

Amplifiers

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
1700	.20	-85	15.72	126	.0155	8	.24	-20
1800	.20	-81	15.00	112	.0182	-20	.19	-29
1900	.19	-78	15.04	98	.0206	-5	.16	-42
2000	.20	-74	14.80	84	.0160	-20	.13	-51
2100	.19	-69	14.79	69	.0177	-30	.10	-59
2200	.19	-62	15.12	55	.0214	-38	.07	-62
2300	.19	-50	15.50	38	.0203	-38	.06	-63
2400	.24	-38	15.60	20	.0229	-36	.04	-58

