

RF AMPLIFIER

MODEL TR9756

Available as: TR9756, 4 Pin TO-8B (T8)
 TR9756-9, 12 Pin TO-8B (T9)
 RN9756, 4 Pin Surface Mount (SM19)
 BR9756, Connectorized Housing (H2)

Features

- Low Noise Figure: < 1 dB Typical
- Low 5 Volt Operation
- Unconditionally Stable
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency (mHz)	1200 - 1700 MHz	1200 - 1700 MHz
Gain (dB)	27	25.0 Min.
Power @ 1 dB Comp. (dBm)	+15	+14 Min.
Reverse Isolation (dB)	-38	-36 Max.
VSWR In	1.8:1	2.0:1 Max.
Out	1.8:1	2.0:1 Max.
Noise figure (dB)	<1.0	1.75 Max.
Power Vdc	+5	+5
mA	60	63 Max.

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

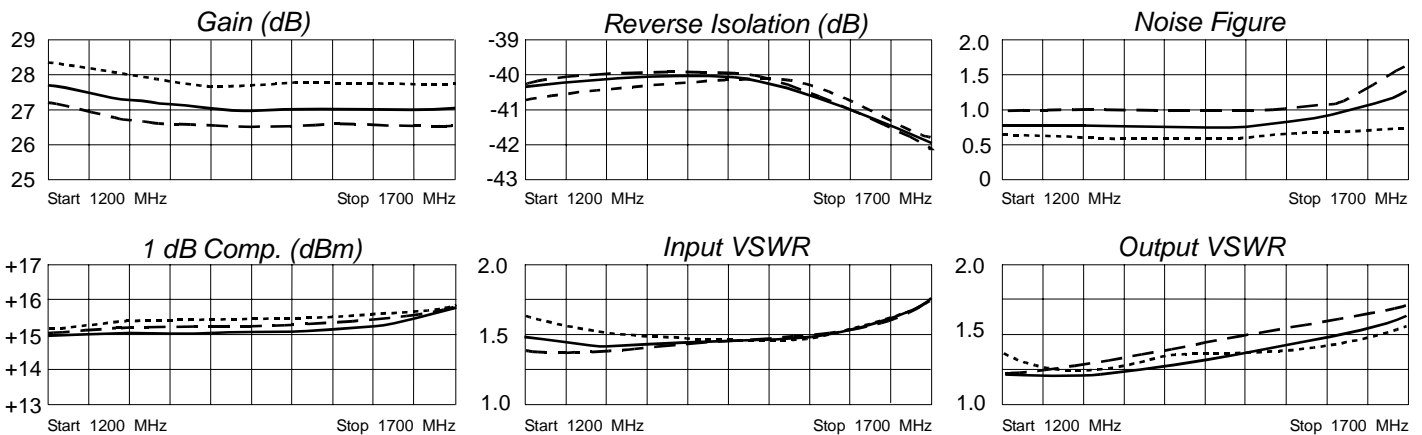
Typical Intermodulation Performance at 25 ° C

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 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
1200	.06	121	24.08	-157	.0099	116	.01	-42
1300	.11	166	22.94	176	.0103	101	.02	-99
1400	.14	163	21.96	152	.0115	82	.03	-130
1500	.13	152	21.77	126	.0113	53	.04	-153
1600	.07	108	21.35	99	.0097	39	.05	-170
1700	.15	-25	21.35	69	.0071	10	.06	170



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