

RF AMPLIFIER

MODEL TR9771

Available as: TR9771, 4 Pin TO-8B (T8)
 TR9771-9, 12 Pin TO-8B (T9)
 WN9771, 10 Pin Gullwing (SG4)
 BR9771, Connectorized Housing (H2)

Features

- n Low Noise Figure: <1 dB Typical
- n Unconditionally Stable
- n Operating Temp. - 55 °C to +85 °C
- n 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 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	+15	+15
mA	60	63 Max.

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

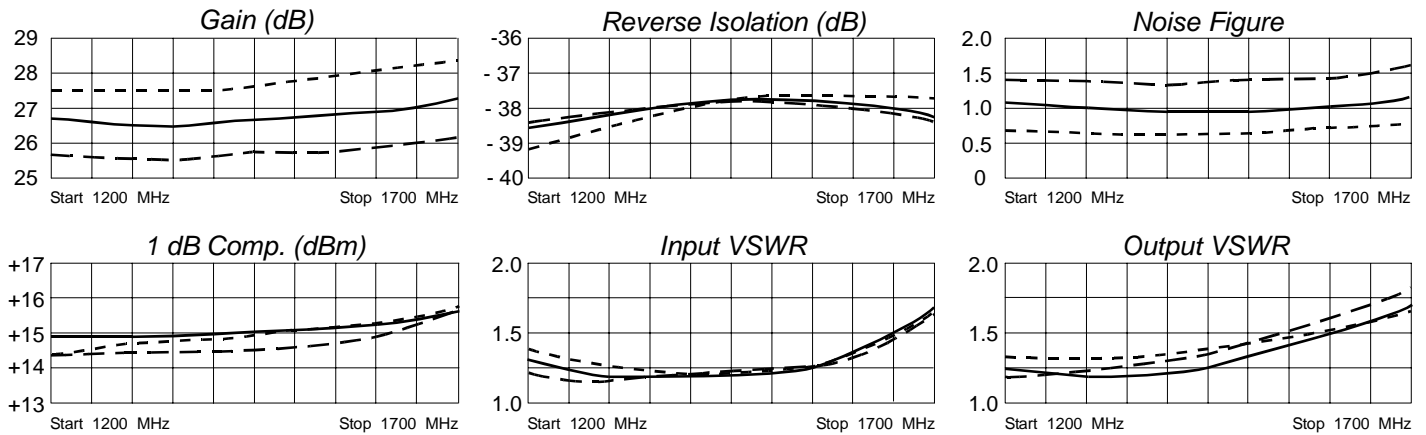
Typical Intermodulation Performance at 25 ° C

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 +18 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.)

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	.21	57	24.56	-163	.0109	118	.03	-4
1300	.15	52	23.86	171	.0128	96	.03	-37
1400	.10	51	22.90	146	.0172	79	.04	-69
1500	.08	36	23.13	121	.0170	54	.05	-101
1600	.10	11	22.89	93	.0174	32	.06	-128
1700	.22	-28	22.82	61	.0147	-5	.06	-164



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