

# RF AMPLIFIER

## MODEL *TM9355*

Available as: TM9355, 4 Pin TO-8 (T4)  
 TN9355, 4 Pin Surface Mount (SM3)  
 FP9355, 4 Pin Flatpack (FP4)  
 BX9355, Connectorized Housing (H1)

### Features

- Medium Gain: 10 dB Gain Typical
- Low Noise Figure: <4 dBm 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	5 - 2000 MHz	5 - 2000 MHz
Gain (dB)	10	9 Min.
Power @ 1 dB Comp. (dBm)	11	10 Min.
Reverse Isolation (dB)	-16	-15 Max.
VSWR In	1.8:1	2.0:1 Max.
VSWR Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	<4.0	6.0 Max.
Power Vdc	+5	+5
Power mA	30	33 Max.

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

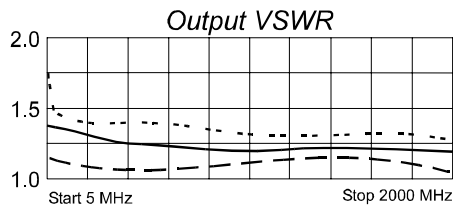
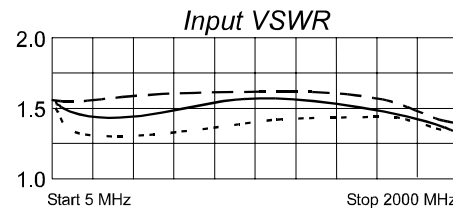
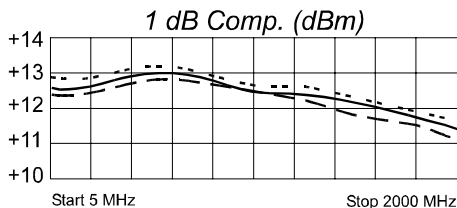
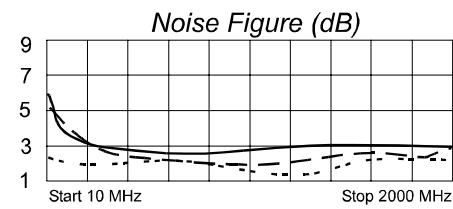
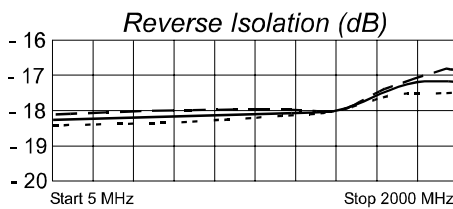
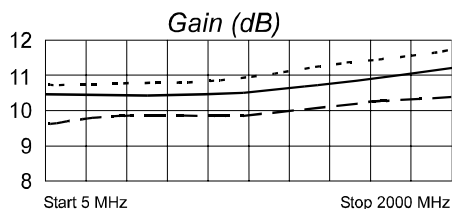
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +38 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +32 dBm (Typ.)  
 Third Order Two Tone Intercept Point..... +24 dBm (Typ.)

### Absolute Maximum (No Damage) 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 ... 100 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.2 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
10	.22	-21	3.33	-170	.1212	5	.11	160
100	.20	-11	3.35	175	.1205	-3	.10	174
200	.20	-20	3.34	168	.1194	-6	.09	176
400	.21	-37	3.33	155	.1207	-12	.09	175
600	.22	-54	3.32	143	.1224	-19	.08	179
800	.23	-69	3.34	130	.1215	-27	.08	-180
1000	.24	-84	3.36	117	.1244	-33	.08	-177
1200	.25	-96	3.39	104	.1240	-43	.08	-174
1400	.25	-111	3.41	91	.1275	-50	.09	-176
1600	.25	-125	3.47	77	.1270	-59	.08	179
1800	.24	-143	3.56	63	.1321	-72	.06	172
2000	.21	-174	3.57	46	.1313	-81	.04	173



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