

RF AMPLIFIER

MODEL *TM6575*

Available as: TM6575, 4 Pin TO-8 (T4)
 TN6575, 4 Pin Surface Mount (SM3)
 FP6575, 4 Pin Flatpack (FP4)
 BX6575, Connectorized Housing (H1)

Features

- High Gain: +21 dB Typical
- Low Noise: 2.7 dB Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +33 (Typ.)
 Second Order Two Tone Intercept Point +28 (Typ.)
 Third Order Two Tone Intercept Point +21 (Typ.)

Specifications

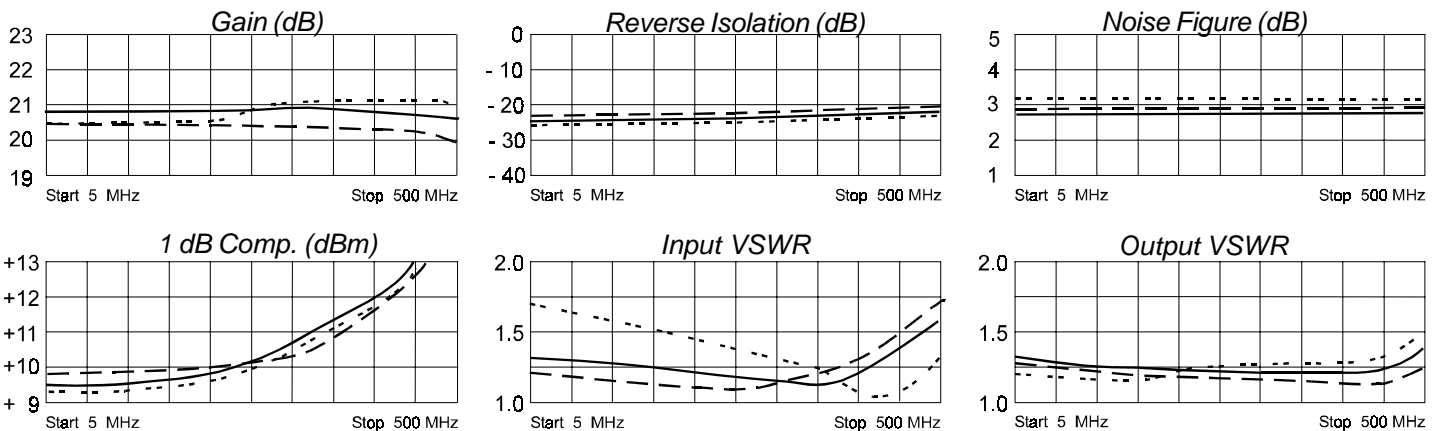
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 500 MHz	5 - 500 MHz
Gain (dB)	21	19 Min.
Power @ 1 dB Comp. (dBm)	+ 9.5	+ 8.5 Min.
Reverse Isolation (dB)	- 23	- 21 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.25:1	2.0:1 Max.
Noise figure (dB)	2.7	3.5 Max.
Power Vdc	+15	+15
mA	23	27 Max.

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

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 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
5	.16	-174	10.41	-177	.05	5	.14	-174
50	.15	163	10.37	168	.05	1	.13	167
100	.14	145	10.35	155	.05	1	.12	152
200	.11	108	10.36	129	.06	1	.11	122
300	.06	46	10.43	103	.06	0	.09	95
400	.09	-69	10.57	73	.07	-3	.11	74
500	.23	-129	10.17	38	.08	-9	.18	41



2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 •••• FAX 215-464-4001 3/17/03