

# RF AMPLIFIER

## MODEL *TM6577*

Available as: TM6577, 4 Pin TO-8 (T4)  
 TN6577, 4 Pin Surface Mount (SM3)  
 FP6577, 4 Pin Flatpack (FP4)  
 BX6577, Connectorized Housing (H1)

### Features

- High Gain: 16.5 dB Typical
- Output Power: +17 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 - 500 MHz	5 - 500 MHz
Gain (dB)	16.5	15.0 Min.
Power @ 1 dB Comp. (dBm)	+17	+15.0 Min.
Reverse Isolation (dB)	-18.5	-17 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	3.5	5.5 Max.
Power Vdc	+15	+15
mA	50	55 Max.

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

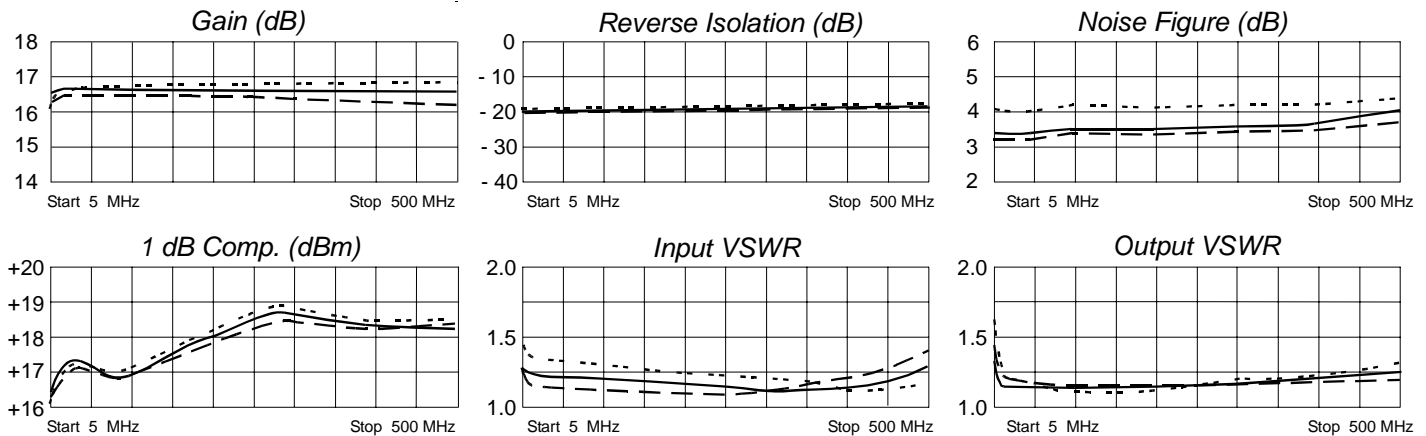
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +48 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +42 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +32 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 ..... 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	.13	-121	6.73	-170	.09	11	.15	136
50	.09	-180	6.90	171	.10	-0	.06	161
100	.08	170	6.88	159	.09	-1	.05	170
200	.07	161	6.85	138	.10	-2	.05	171
300	.05	170	6.79	117	.10	-4	.07	162
400	.07	-164	6.79	94	.11	-8	.09	148
500	.13	-158	6.71	70	.12	-12	.12	122



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