

RF AMPLIFIER

MODEL *TM6515*

Available as: TM6515, 4 Pin TO-8 (T4)
 TN6515, 4 Pin Surface Mount (SM3)
 FP6515, 4 Pin Flatpack (FP4)
 BX6515, Connectorized Housing (H1)

Features

- Medium Gain: +16.5 dBm Typical
- Medium Output Power: +16.5 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)	12.5	11.0 Min.
Power @ 1 dB Comp. (dBm)	+16.5	+15.0 Min.
Reverse Isolation (dB)	-16	-15 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	4.5	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.

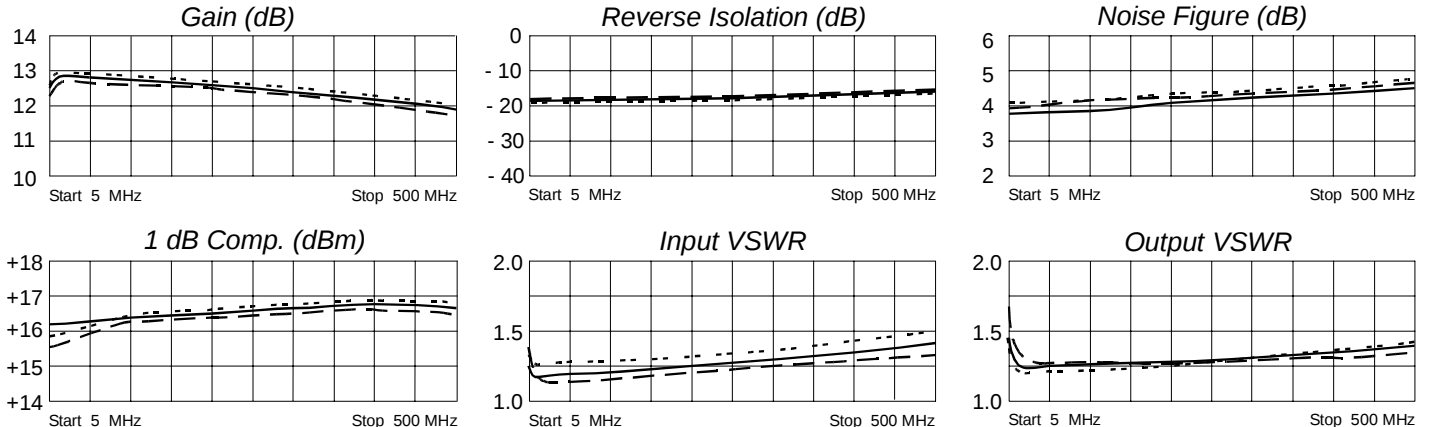
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +50 dBm (Typ.)
 Second Order Two Tone Intercept Point +43 dBm (Typ.)
 Third Order Two Tone Intercept Point +31 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	.11	-126	4.26	-172	.13	9	.18	144
50	.09	171	4.37	173	.14	- 0	.11	175
100	.09	150	4.34	164	.14	- 2	.11	-178
200	.11	125	4.26	147	.14	- 6	.12	-172
300	.13	106	4.17	131	.14	- 9	.14	-170
400	.15	89	4.03	115	.15	-13	.15	-174
500	.17	78	3.92	100	.15	-18	.17	179
600	.18	68	3.79	85	.16	-23	.18	171



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