

RF AMPLIFIER

MODEL *TM5133*

Available as: TM5133, 4 Pin TO-8 (T4)
 TN5133, 4 Pin Surface Mount (SM3)
 FP5133, 4 Pin Flatpack (FP4)
 BX5133, Connectorized Housing (H1)

Features

- Output Power: +16 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+51 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+45 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+30 dBm (Typ.)

Specifications

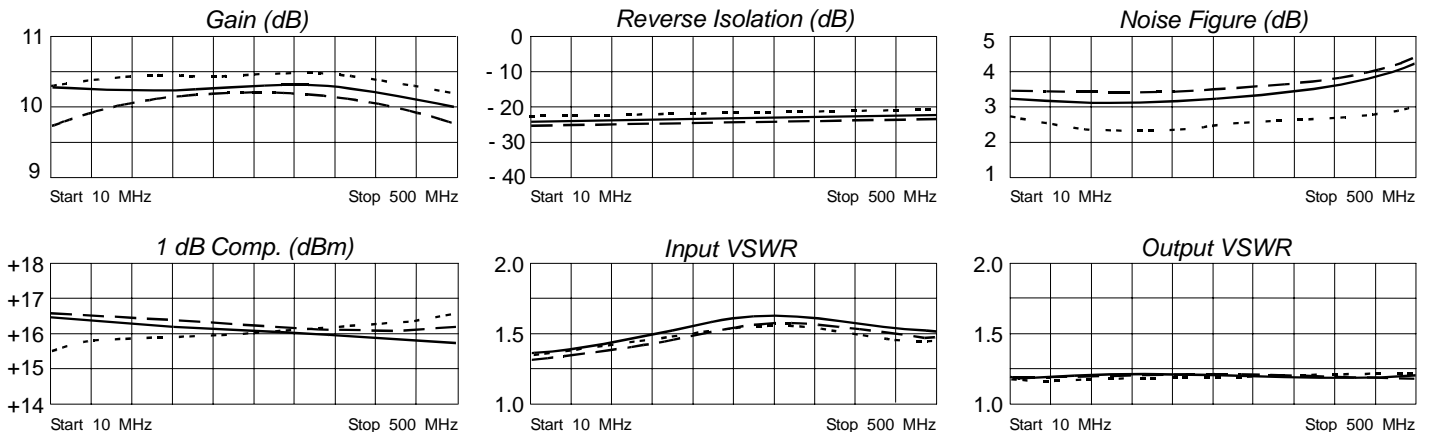
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 500 MHz	10 - 500 MHz
Gain (dB)	10	9.0 Min.
Power @ 1 dB Comp. (dBm)	+16	+14.5 Min.
Reverse Isolation (dB)	-22	-21 Max.
VSWR In	1.75:1	2.0:1 Max.
Out	1.2:1	2.0:1 Max.
Noise Figure (dB)	3.3	4.5 Max.
Power Vdc	+15	+15 Min.
mA	57	60 Max.

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.)

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

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	.12	- 37	3.33	-173	.07	-175	.10	-160
50	.11	- 51	3.32	165	.07	164	.10	171
100	.16	- 76	3.28	148	.07	145	.09	151
200	.25	-110	3.22	116	.07	110	.09	115
300	.30	-136	3.18	84	.07	78	.06	75
400	.27	-167	3.28	49	.08	42	.03	- 18
500	.09	122	3.33	6	.09	5	.09	-145



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