

RF Amplifier

Low Noise: 2.5 dB

Model TM6345

10 to 1100 MHz

Features

- Low Noise Figure: 2.5 dB Typical
- Low Output Power: +17 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL	MIN/MAX	
	Ta= 25 °C	Ta = -55 °C to +85 °C	
Frequency	10 - 1100 MHz	10 - 1100 MHz	
Gain (dB)	12.3	10.5	Min.
Power @ 1 dB Comp. (dBm)	+17	+15.0	Min.
Reverse Isolation (dB)	- 13.5	- 12.0	Max.
VSWR	In	<1.5:1	2.0:1 Max.
	Out	<1.75:1	3.0:1 Max.
Noise figure (dB)	<3.0	4.0	Max.
Power	Vdc	+15	+15 Max.
	mA	45	48 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 +54 dBm (Typ.)
 Second Order Two Tone Intercept Point +46 dBm (Typ.)
 Third Order Two Tone Intercept Point +33 dBm (Typ.)

Maximum Ratings

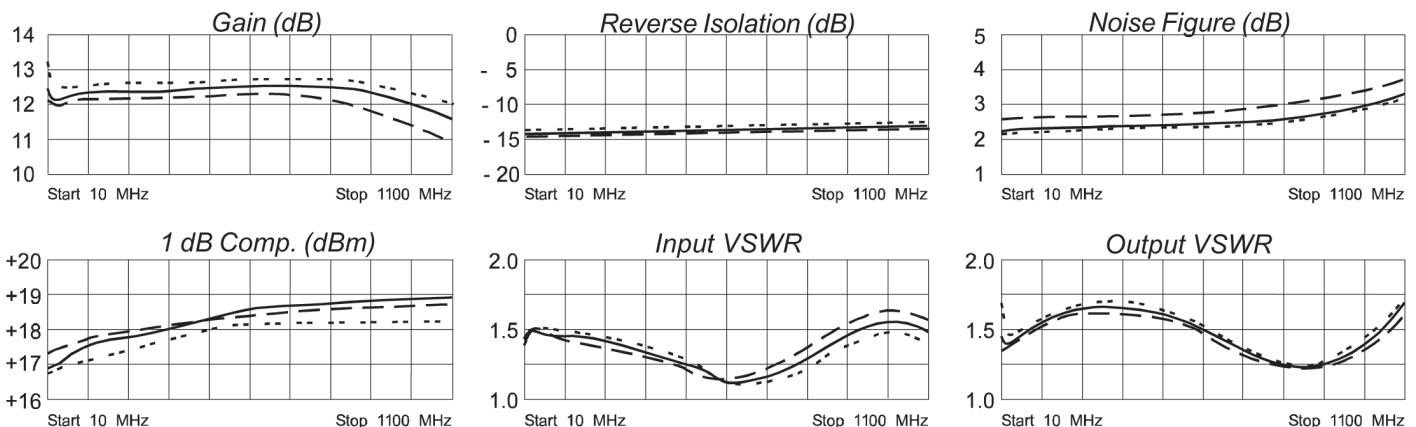
Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 18 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power 50 Milliwatts
 (1 Minute Max.)
 Maximum Peak Power 0.5 Watt
 (3 µsec Max.)

Packaging Options (see Appendix)

TM6345, 4 Pin TO-8 (T4)
 TN6345, 4 Pin Surface Mount (SM3)
 FP6345, 4 Pin Flatpack (FP4)
 BX6345, Connectorized Housing (H1)

Amplifiers

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	.17	179	4.20	-166	.17	-169	.18	18
100	.18	132	4.14	162	.18	163	.20	9
200	.17	93	4.13	140	.18	144	.24	1
400	.13	26	4.14	99	.18	109	.24	- 26
600	.05	- 83	4.15	57	.20	73	.20	- 53
800	.15	144	4.10	12	.20	36	.13	-111
1100	.19	44	3.73	- 61	.21	- 23	.24	144

