

RF AMPLIFIER

MODEL *TM6526PM*

Available as: TM6526PM, 4 Pin TO-8 (T4)
 TN6526PM, 4 Pin Surface Mount (SM3)
 FP6526PM, 4 Pin Flatpack (FP4)
 BX6526PM, Connectorized Housing (H1)

Features

- Superior Phase Noise Performance
- High Gain 28 dB 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	10 - 500	10 - 500 MHz
Gain (dB)	28	26 Min
Power @ 1 dB Comp. (dBm)	20.5	18.5 Min.
Reverse Isolation (dB)	-38	-35
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	<3.75	4.0 Max.
Power Vdc	+15	+15
mA	93	96 Max.

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +56 dBm (Typ.)
 Second Order Two Tone Intercept Point +50 dBm (Typ.)
 Third Order Two Tone Intercept Point +34 dBm (Typ.)

Maximum Ratings

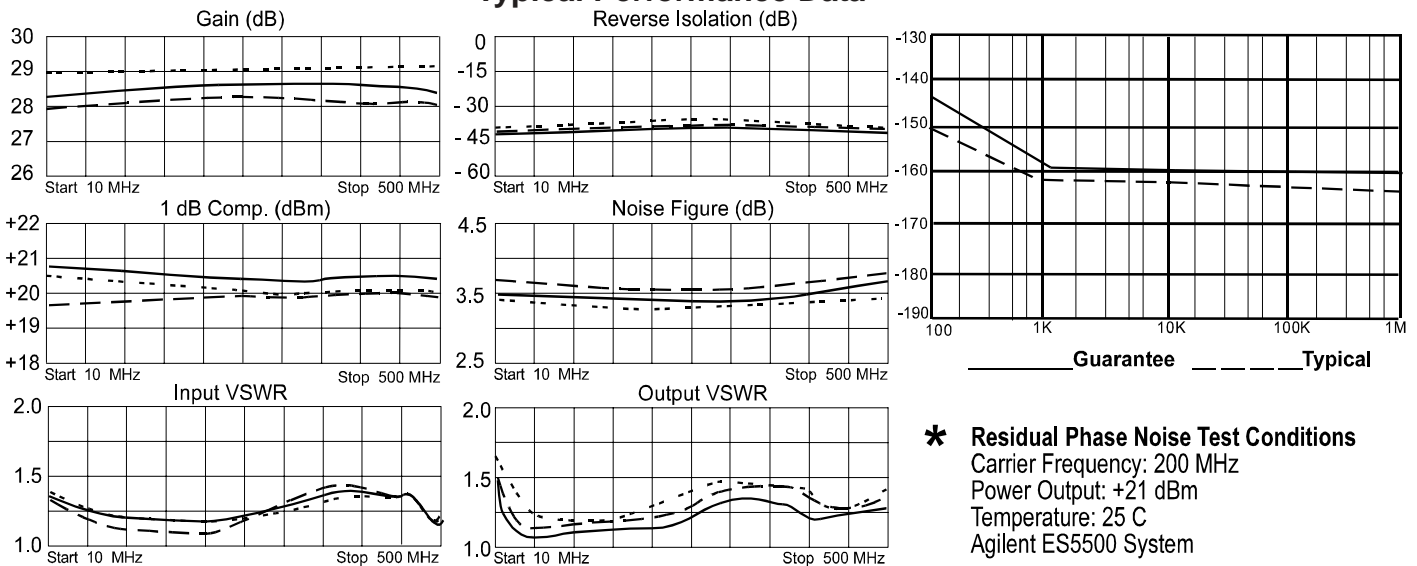
Ambient Operating Temperature -55°C to +100 °C
 Storage Temperature -62°C to +125 °C
 Case Temperature +125 °C
 DC Voltage +18 Volts
 Continuous RF Input Power +13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

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

Guaranteed Phase Noise Performance (dBc/Hz)

Frequency	Typical	Guarantee
100 Hz	-153	-150
1 kHz	-161	-157
10 kHz	-163	-159
100 kHz	-164	-160
1 MHz	-164	-160

Typical Performance Data



* Residual Phase Noise Test Conditions
 Carrier Frequency: 200 MHz
 Power Output: +21 dBm
 Temperature: 25 C
 Agilent ES5500 System

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	.07	95	26.94	9	.01	18	.13	128
50	.03	90	27.31	- 18	.01	5	.06	-155
100	.04	90	27.35	- 41	.01	- 12	.12	-142
200	.09	84	27.23	- 84	.01	- 10	.23	-161
300	.15	55	26.84	-129	.01	- 28	.25	165
400	.16	27	26.60	-173	.01	- 60	.24	128
500	.12	- 3	27.36	139	.01	- 45	.24	76



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