

RF AMPLIFIER

MODEL TN9486

Available as: TN9486, 4 Pin Surface Mount (SM3)
 FP9486, 4 Pin Flatpack (FP4)
 BX9486, Connectorized Housing (H1L)

Features

- High Gain: 20.0 dB Typical
- High Output Power: +20.5 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	100 - 4000 MHz	100 - 4000 MHz
Gain (dB)	20.0	18.0 Min.
Gain Flatness (dB)	±0.5	±1.0 Max.
Power @ 1 dB Comp. (dBm)	+20.5	+19.5 Min.
Reverse Isolation (dB)	-39	-30 Max.
VSWR In	<1.6:1	1.9:1 Max.
Out	<1.8:1	2.1:1 Max.
Noise Figure (dB)	<3.8	5.0 Max.
Power Vdc	+15	+15
mA	110	125 Max.

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

Revision: June 28, 2017 ECN (H1L Laser Welded Housing now used in place of H1 Housing)

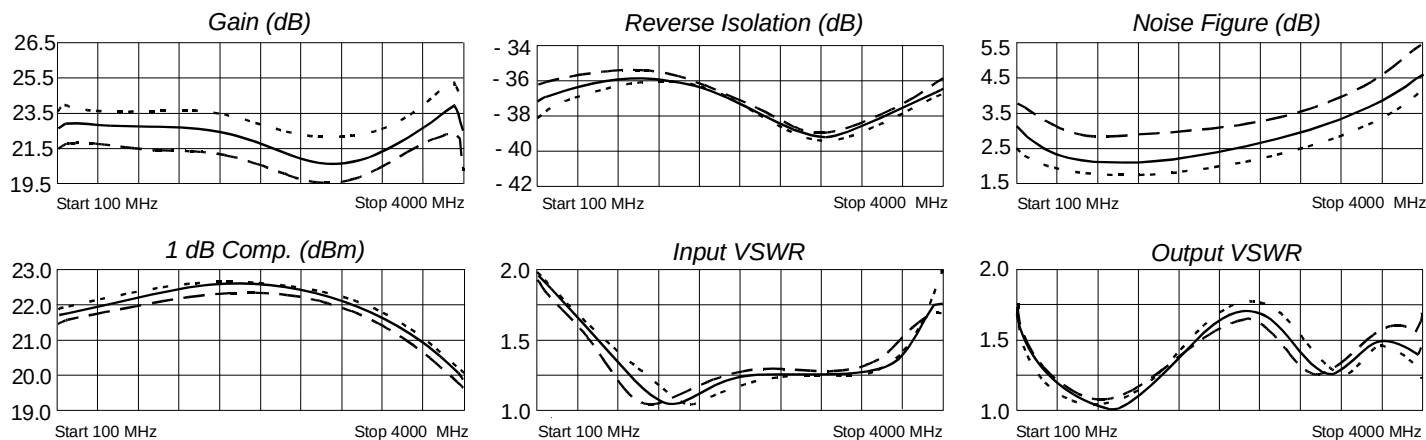
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +48 dBm (Typ.)
 Second Order Two Tone Intercept Point +42 dBm (Typ.)
 Third Order Two Tone Intercept Point +30 dBm (Typ.)

Maximum (No Damage) Ratings

Ambient Operating Temperature -55°C to +100 °C
 Storage Temperature -62°C to +125 °C
 Case Temperature +125 °C
 DC Voltage +17 Volts
 Continuous RF Input Power +17 dBm
 Short Term RF Input Power 200 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
100	.33	-171	12.90	16	.01	23	.26	73
880	.13	122	13.52	-85	.02	-24	.05	-113
1660	.14	-137	12.71	-169	.02	-65	.17	-46
2440	.22	174	11.57	112	.01	-132	.27	-120
3220	.19	137	11.35	30	.01	166	.03	77
4000	.16	42	13.84	-97	.02	62	.15	-54



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