Model # TM7294

Available as:

TM7294, 4 Pin TO-8 (T4)
TN7294, 4 Pin 0.450” Sq. Surface Mount (SM3)
BX7294, SMA Connectorized Housing (H1)

Standard RF/Microwave Amplifier

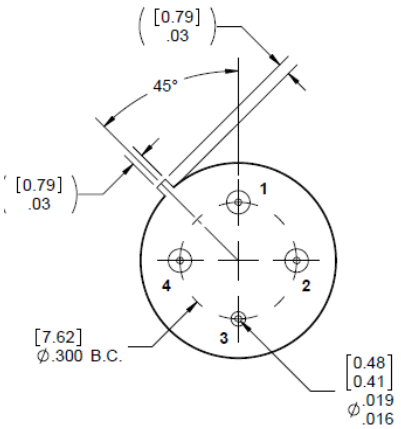
Features

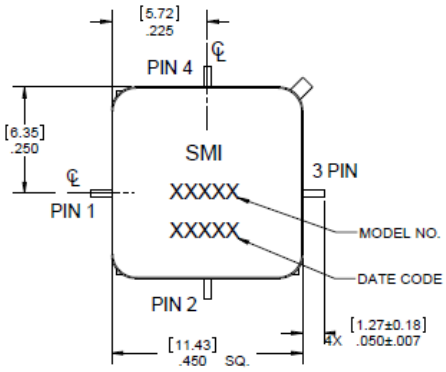
- Low Noise Figure
- Wide 10 – 300 MHz Bandwidth
- Environmental Screening Available
- Unconditionally Stable

Technical Specifications

Characteristic		TYPICAL Ta = +25 ºC	MIN/MAX Ta = -55ºC to +85 ºC
Frequency		10 – 300 MHz	10 – 200 MHz
Gain (dB)		29.3	28.0 Min.
Power @ 1 dB Comp. (dBm)		+22.5	+21 Min.
Reverse Isolation (dB)		-36	---
VSWR	In	1.5:1	2.0:1 Max.
	Out	1.5:1	2.0:1 Max.
Noise Figure (dB)*		3.5	4.5 Max.
Power	Vdc	+15	+15
	mA	60	70 Max.

1) Care should always be taken to effectively ground the case of each unit
2) Typical values are measured at 25°C, but not guaranteed.
3) Package drawings below are for reference only.





Typical Intermodulation Performance at 25 ºC

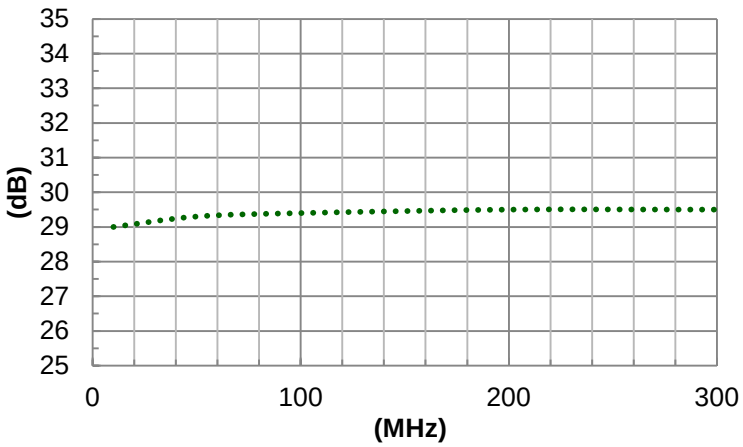
Second Order Harmonic Intercept Point:	+50 dBm (Typ.)
Second Order Two Tone Intercept Point:	+44 dBm (Typ.)
Third Order Two Tone Intercept Point:	+32 dBm (Typ.)

Note: Measured at 100 MHz at 25C.

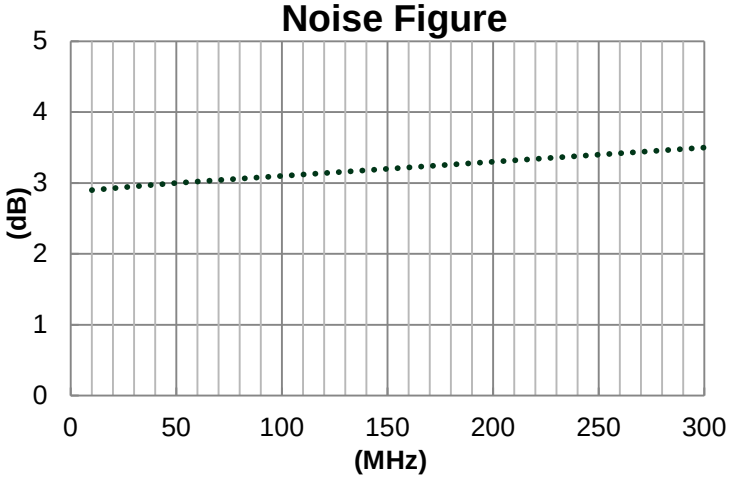
Absolute Maximum (No Damage) Ratings

Operating Temperature	-55ºC to +100 ºC
Storage Temperature	-62ºC to +125ºC
Case Temperature	+125 ºC
DC Voltage	+18 Volts
Continuous RF Input Power	+13 dBm

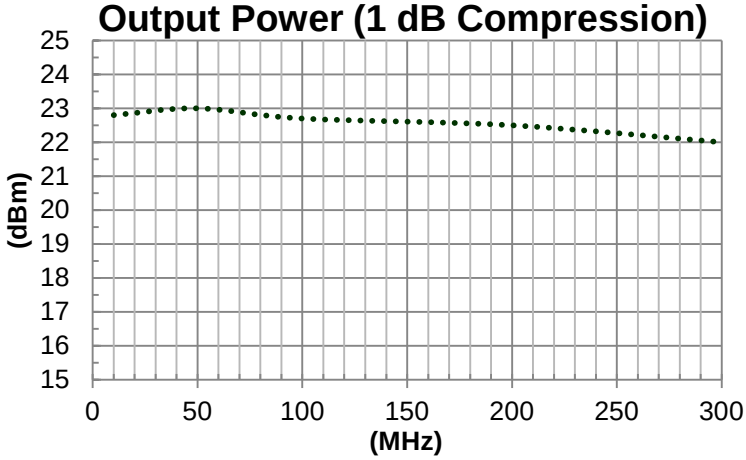
Gain



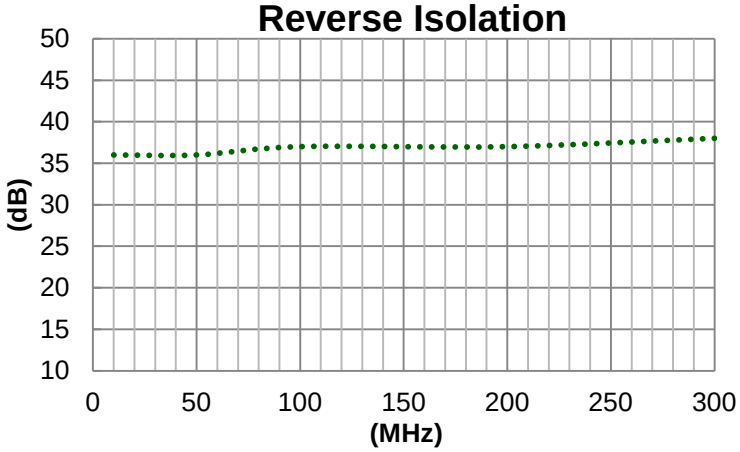
Noise Figure



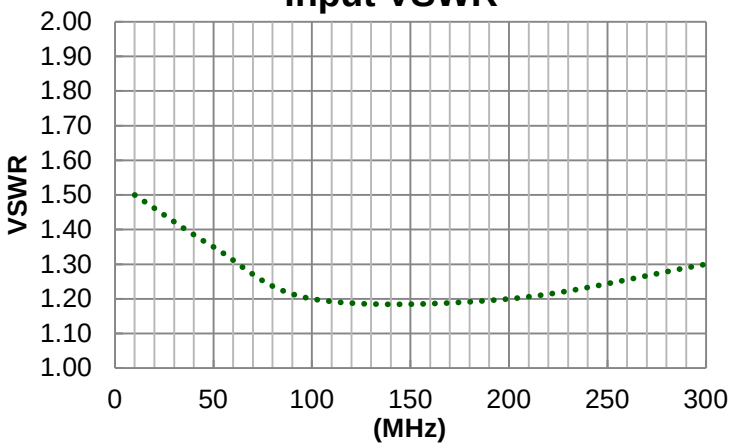
Output Power (1 dB Compression)



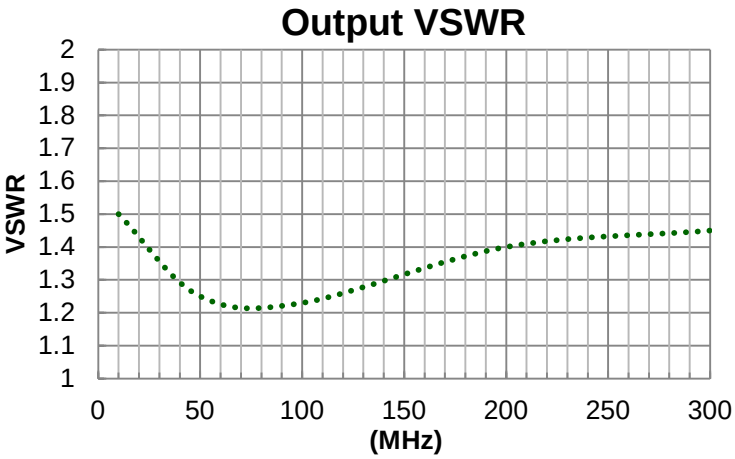
Reverse Isolation



Input VSWR



Output VSWR



Instructions

Grounding Instructions	Care should be taken to effectively ground each unit.
Revisions	API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice.
Min./Max. Values	Specifications are guaranteed when tested in a 50 Ω (ohm) system.
Typical performance graphs and values are measured at 25°C, but not guaranteed.	

1) Outlines drawings (BX7294) below are for reference only.