

Available as:

TM6291, 4 Pin TO-8 Package(T4)  
 TN6291, 4 Pin 0.450" Sq. Surface Mount (SM3)  
 BX6291, SMA Connectorized Housing (H1)

## RF/Microwave Amplifier

### Features



- No External Circuitry Needed
- RoHS Compliant Model Available
- Unconditionally Stable
  
- Environmental Screening Available

### Technical Specifications

Characteristic	TYPICAL Ta = +25°C	MIN/MAX Ta = -55°C to +85°C
Frequency	30 – 1400 MHz	30 – 1400 MHz
Gain (dB)	18.0	16.0 Min.
Gain Flatness (dB)	+/- 0.5	-
Power @ 1 dB Comp. (dBm)	+19.5	+18.0 Min.
Reverse Isolation (dB)	-22	--
VSWR	Input**	2.0:1 Max.
	Out	2.0:1 Max.
Noise Figure (dB) (200-1400 MHz)	1.3	1.8 Max.
Power	Vdc	+5
	mA	63

### Typical Intermodulation\* Performance at 25°C

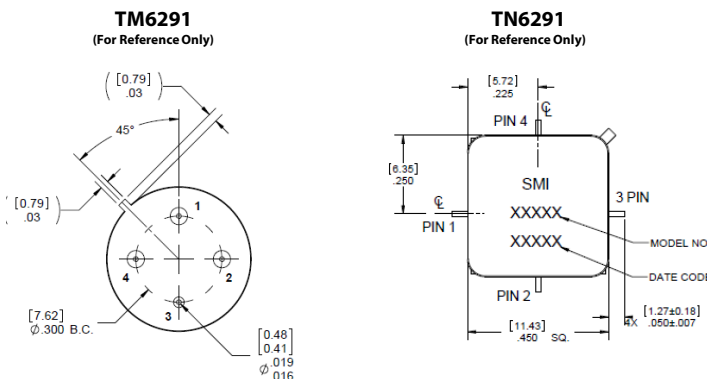
Second Order Harmonic Intercept Point:	+51 dBm (Typ.)
Second Order Two Tone Intercept Point:	+45 dBm (Typ.)
Third Order Two Tone Intercept Point:	+32 dBm (Typ.)

\*Note: Measured at the Midband Point.

\*\*Note: Input VSWR .3 higher below 50 MHz.

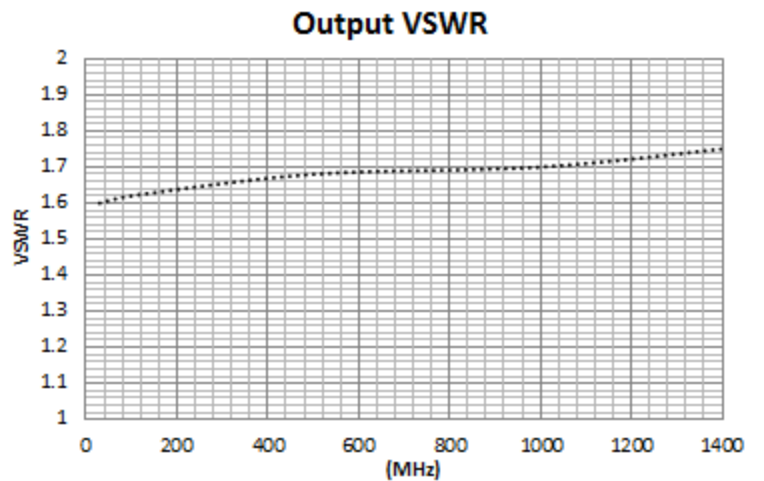
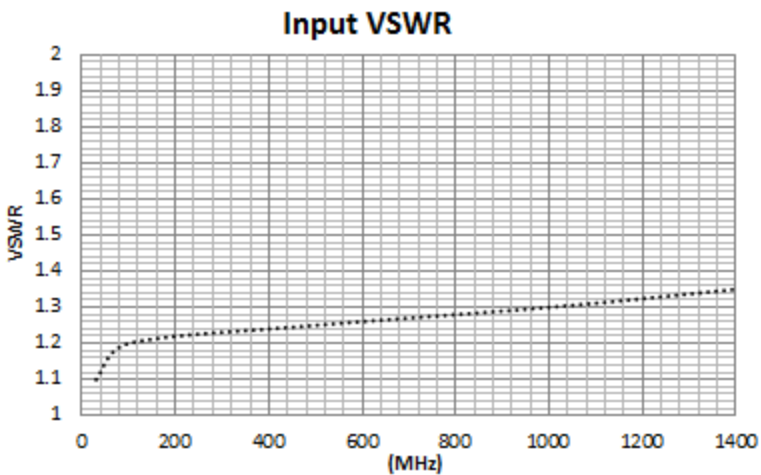
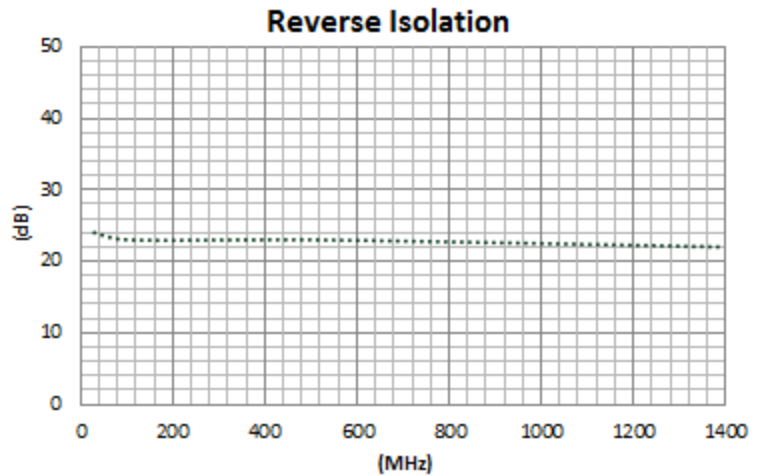
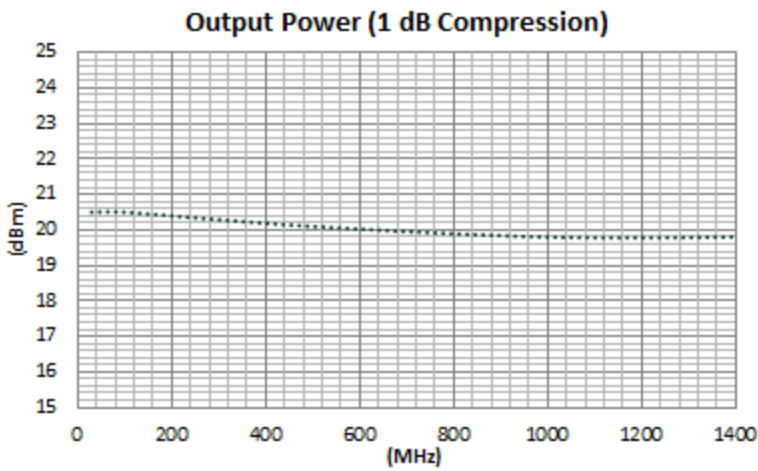
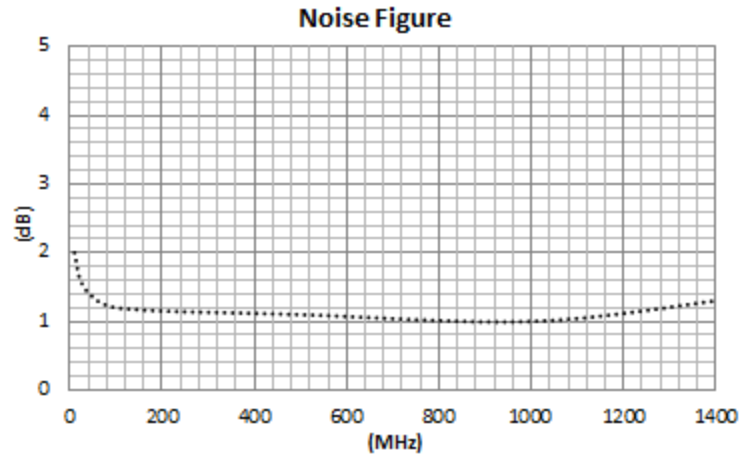
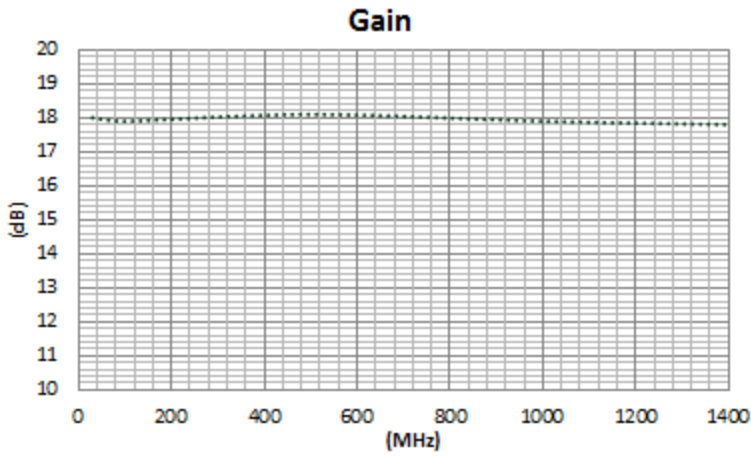
### Maximum Ratings

Absolute Maximum (No Damage) Rating	
Operating Temperature	-55°C to +100 °C
Storage Temperature	-62°C to +125°C
Case Temperature	+125 °C
DC Voltage	+8 Volts
Continuous RF Input Power	+21 dBm
Short Term RF Input Power	200 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 µsec Max.)



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.	

**Typical Performance Graphs**



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**Outline Drawing**

(for reference only)

