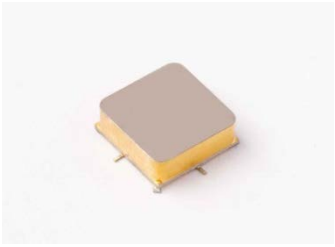
Model # TN9240

Available as:
TN9240, 4 Pin 0.450" Sq. Surface Mount (SM3)
BX9240, SMA Connectorized Housing (H1L)

RoHS COMPLIANT

RF/Microwave Amplifier



Features

- **No External Circuitry Needed**
- **RoHS Compliant Model Available**
- **Unconditionally Stable**
- **EAR99**

Technical Specifications

Characteristic		TYPICAL Ta = +25 °C	MIN/MAX Ta = -55°C to +85 °C
Frequency		2000 MHz – 4000 MHz	2000 MHz – 4000 MHz
Gain (dB)		21	20 Min.
Power @ 1 dB Comp. (dBm)		+21	+20 Min.
Reverse Isolation (dB)		25	---
VSWR	In	1.5:1	2.0:1 Max.
	Out	1.5:1	2.0:1 Max.
Noise Figure (dB)		4.5	6.5 Max.
Power	Vdc	**+5**	**+5**
	mA	150	175 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.
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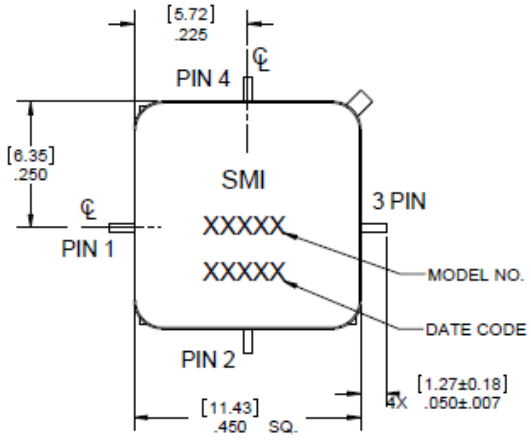
Outline Drawing
(For Reference Only-TN9240)



Typical Intermodulation Performance at 25 °C

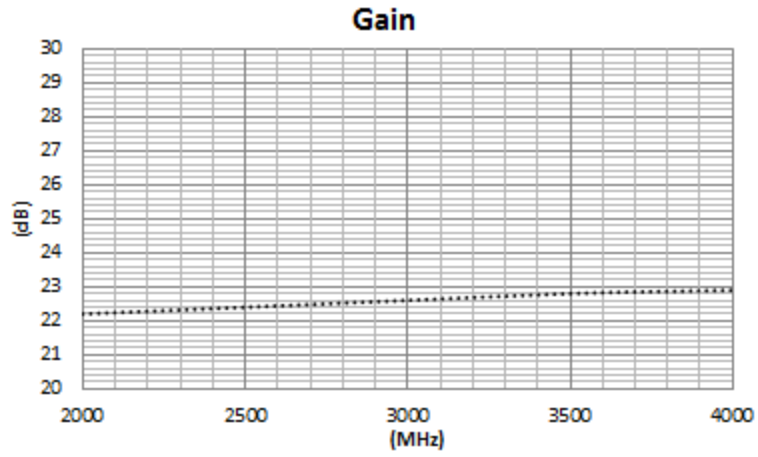
Second Order Harmonic Intercept Point:	+50 dBm (Typ.)
Second Order Two Tone Intercept Point:	+45 dBm (Typ.)
Third Order Two Tone Intercept Point:	+33 dBm (Typ.)

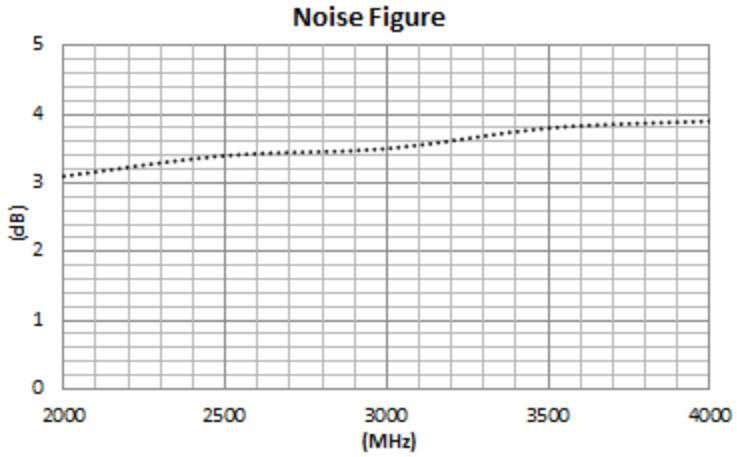
Note: Intercept Values Measured at 3000 MHz.

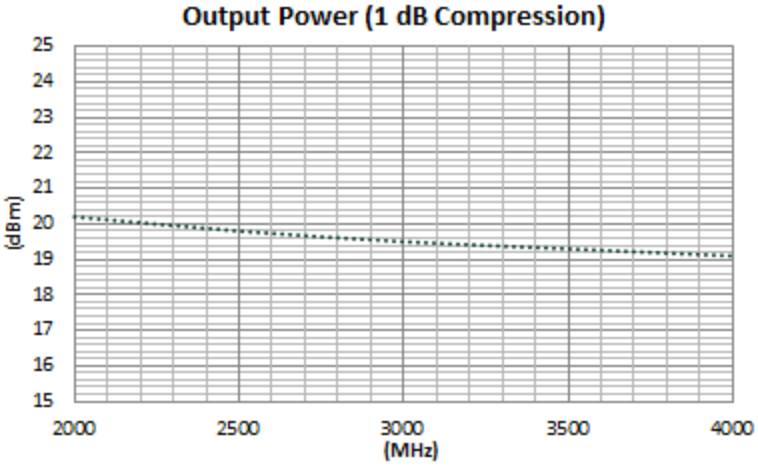
Absolute Maximum (No Damage) Ratings

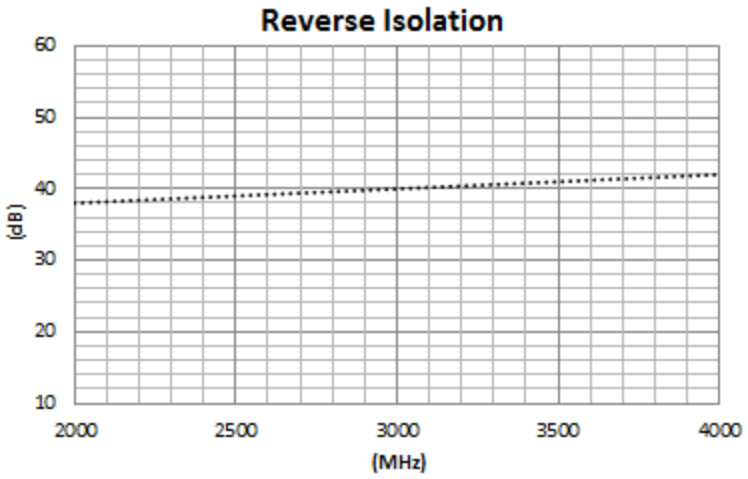
Operating Temperature	-55°C to +100 °C
Storage Temperature	-62°C to +125°C
DC Voltage	+8 Volts
Continuous RF Input Power	+13 dBm
Short Term RF Input Power	100 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 µsec Max.)
Junction Temperature Rise Above Case (Tjc)	52.5°C/W

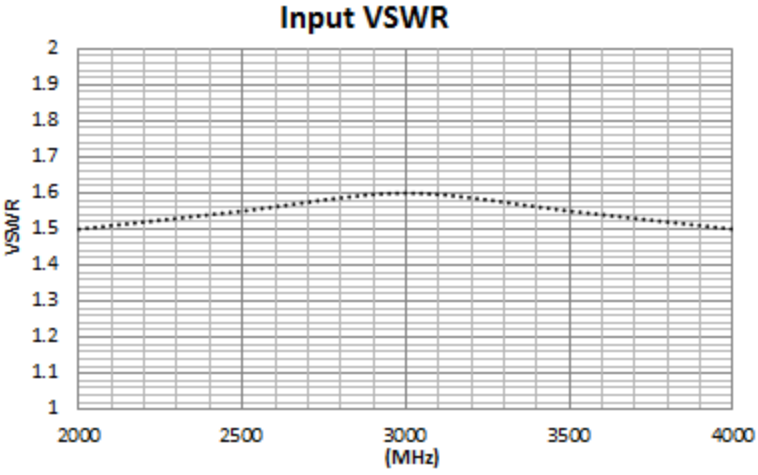
Typical Performance

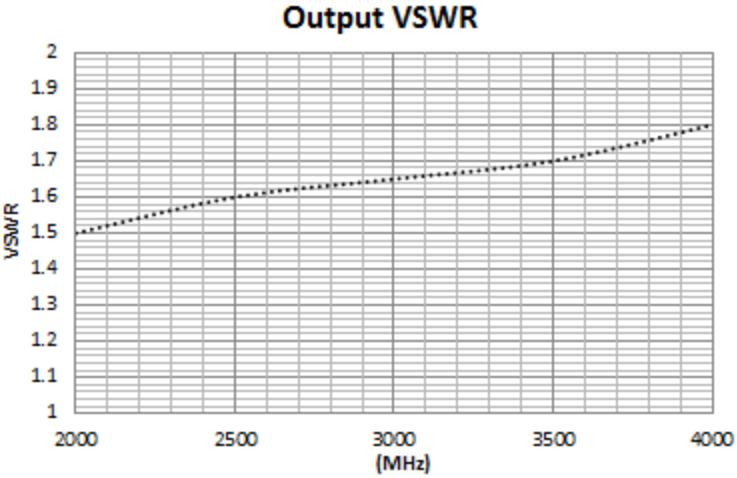












Instructions

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.	

Outline Drawing

(For Reference Only-BX9240)