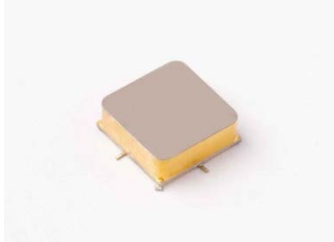


Standard Microwave Amplifier

Frequency Range: 1000 MHz to 6200 MHz



Features

- Broadband Operation: 1000 MHz to 6200 MHz
- High Output Power: +19 dBm
- Low Noise Figure: +4.5 dB
- Hermetic Package

Model TN9063 is a broadband amplifier covering 1000 MHz to 6200 MHz. This higher power design utilizes a hermetically sealed package for superior environmental protection. This standard design may also be ordered in a MIL-STD-883 screened version (Model #SN9063) All specification ratings are based on measurements in a 50 Ω (ohm) system with a DC supply of 15 volts and a voltage tolerance of +/- 2%.

Technical Specifications

Parameter	Unit	Typical	Min/Max
Frequency Range	MHz	1000 - 6200 MHz	2000 - 6000 MHz
Gain	dB	16	14.5 (Min)
Noise Figure	dB	4.5	5.5 (Max)
Output Power @ 1 dB Compression*	dBm	19	17.5 (Min)
Output 3 rd Order Intercept	dBm	31	---
Output 2 nd Order Intercept	dBm	50	---
Reverse Isolation	dB	56	---
Input VSWR	---	1.5:1	2.0:1 (Max)
Output VSWR	---	1.5:1	2.0:1 (Max)
Supply Voltage	volts	+15	+15
Supply Current	mA	105	115 (Max)

Absolute Maximum Ratings

Maximum (No Damage) Ratings	
Storage Temperature	-62°C to +125°C
Operating Temperature	-55°C to +85°C
DC Voltage @ 25°C	+17 volts
Input Drive @ 25°C (CW)	+20 dBm

Typical values are measured at 25°C, but not guaranteed.

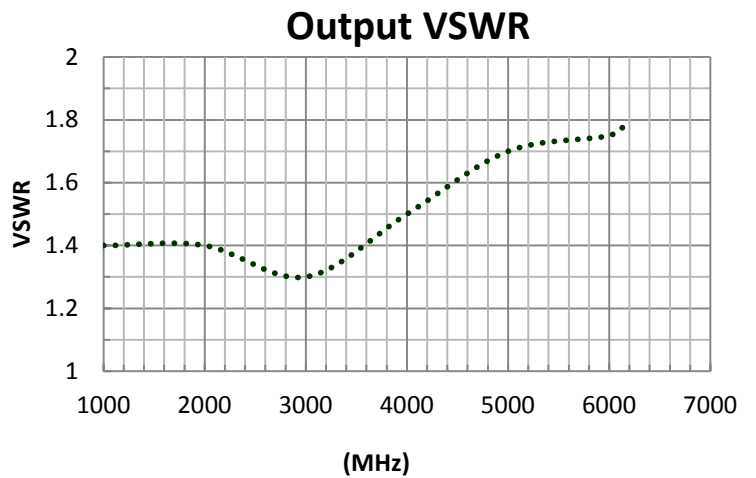
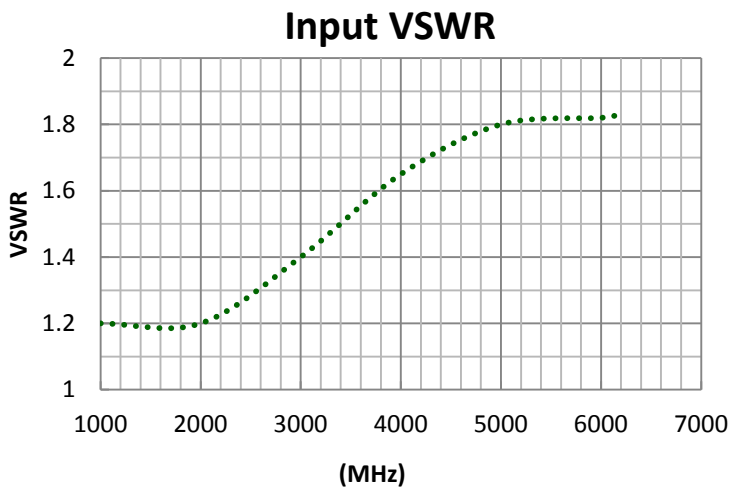
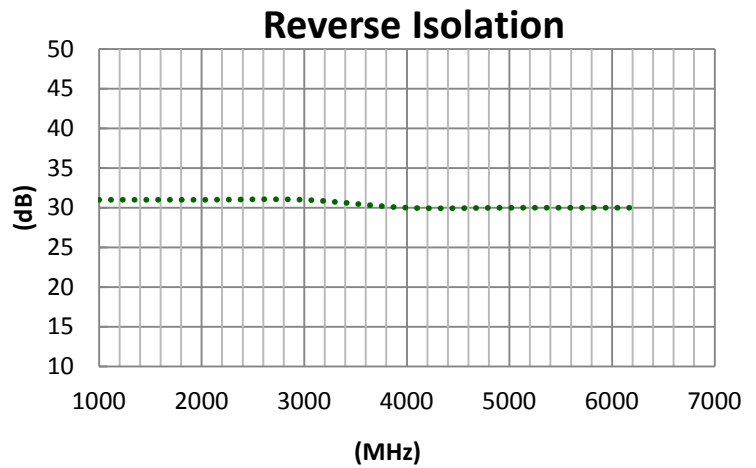
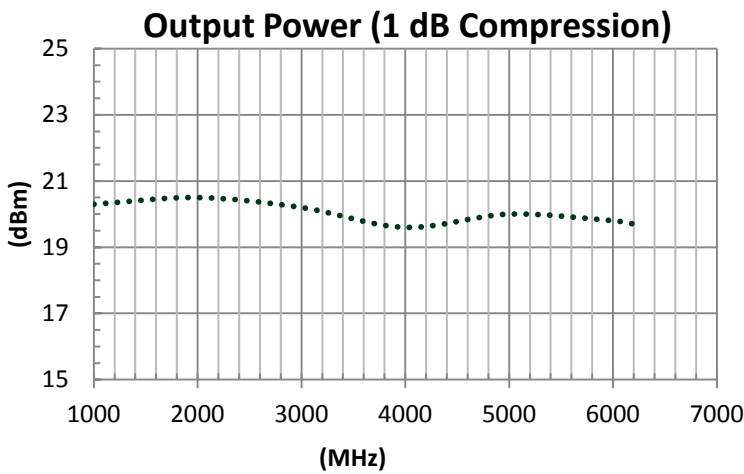
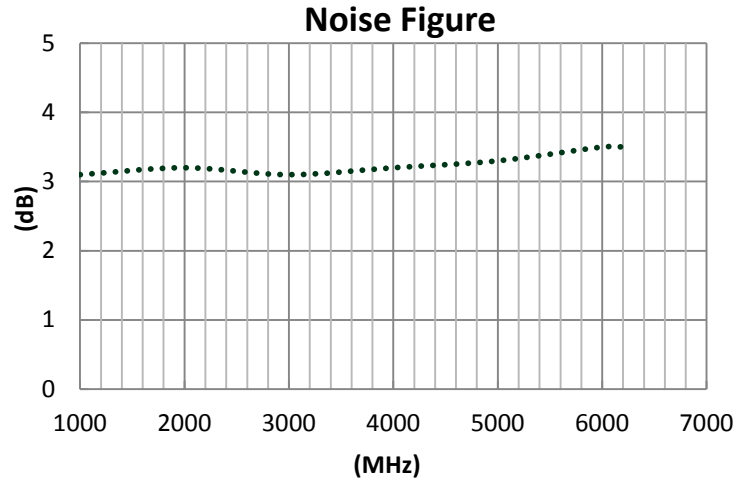
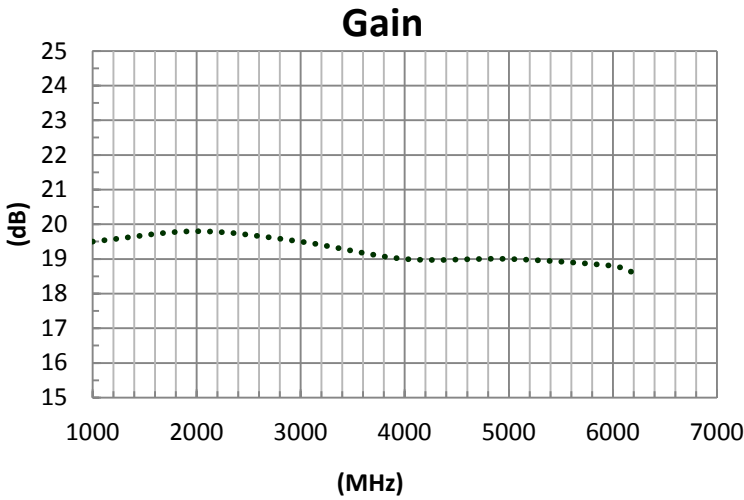
*1.0 dB less above 5200 MHz

Intercept values are typical measured at 4500 MHz

Mechanical & Electrical

Parameter	Specification
Specification Temperatures (Min/Max)	-55°C to +85°C
Package Size (TN9063)	0.450" Square Surfacement
Package Drawing	SM3 Package
RF Connectors (BX9063)	HF1 (SMA Connectors)

Typical Performance Graphs



Typical Performance Graphs

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)

NOTES:

- HOUSING & SEAL COVER ALUMINUM, COVER IS LASER WELDED TO FORM A HERMITIC SEAL.
HOUSING: IS NICKEL PLATED PER AMS-C-26074 CLASS 3, GRADE B,
WELD COVER: CHEMICAL FILM MIL-DTL-5541, TYPE II CLASS 3

