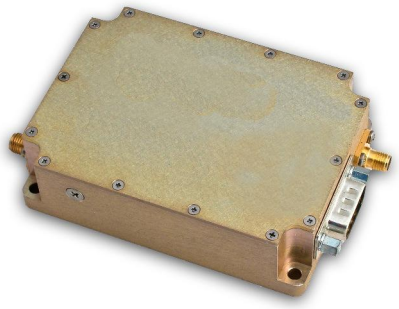
NP Technologies, Inc.

NP-565

1-500 MHz RF Amplifier



- **Linear Power: 5 watts**
- **Voltage = 24 - 28 vdc**
- **Current = 2 amp**
- **Gain: 36 dB**

Description:
1-500 MHz CW amplifier.

ELECTRICAL SPECIFICATION @ VDD= +28VDC: Temp.= 25, 50Ω System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	1		500	MHz
Power Output CW Sat.	Psat		7		Watts
Power Output @ 1 dB Compression Point	P1dB	5			Watts
Gain Small Signal	G1dB	34	36		dB
Input Power for Rated Pout	Pin		2		dBM
Gain Flatness	ΔG			±1.5	dB
Output Return-Loss	S22			-8.0	dB
Input Return-Loss	S11			-12	dB
Noise Figure	NF			10	dB
Harmonics @ 1watt,	H		-36	-30	dBc
Ip3, 27dBm/tone,	IP3		+48.5	+47	dBm
Spurious Signals	Spur		-70	-60	dBc
Operating Voltage	Vdc	24		28	Volt
Quiescent Current	Idq		2.1		Amp
Operating Current @ 5watts	Idd			3.0	Amp

MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimensions	3.5 x 2.5 x 1.0	Max	Inch
RF Connectors IN/OUT	SMA, Female	-	-
DC Connectors	Dsub 9-Pin, male, filtered	-	-
Cooling	External Heatsink (not included)		
Weight	8	Max	oz

PROTECTIONS

Thermal Shutdown	80°C	Typ
Input Overdrive	+10 dBm Max	Max
Load VSWR	Infinite to 5watts Output	Max
Reverse Polarity Protection	None	-

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Units
Operating Case Temperature	Tc	0°C		+80°C	°C
Storage Temperature	Tstg	-40°C		+85°C	°C
Relative humidity non-condensation	RH	95			%

2393 Teller Rd. Suite 108
Newbury Park, Ca. 91320

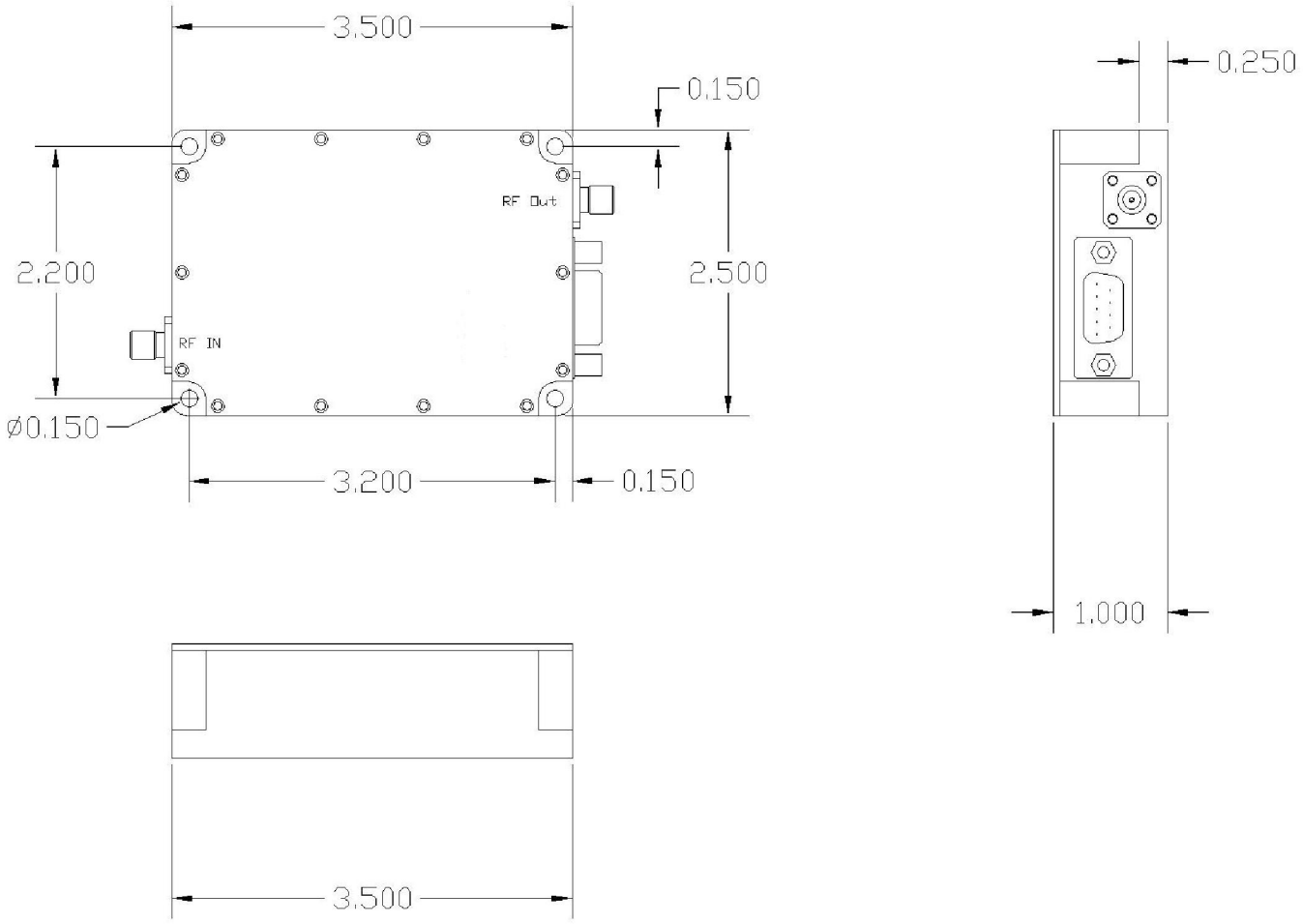
Web: www.nptrf.com
Email: sales@nptrf.com

Phone: (805) 376-9299
Fax: (805) 376-9288

INTERFACE CONNECTOR, Dsub 9 pin

Pin #	Description	Specifications
1	N/C	N/C
2	N/C	N/C
3	N/C	N/C
4	N/C	N/C
5	Shutdown	Amplifier Enable TTL “low” or open, Disable TTL ”High”
6	VDD	+28vdc
7	VDD	+28vdc
8	GND	Ground
9	GND	Ground

HOUSING OUTLINE:



2393 Teller Rd. Suite 108
Newbury Park, Ca. 91320

Web: www.nptrf.com
Email: sales@nptrf.com

Phone: (805) 376-9299
Fax: (805) 376-9288