

3.1 –3.5 GHz Low Noise Amplifiers

FEATURES

- P₁dB: 15 dBm
- Noise Figure: 1.1 dB
- Bias Condition: 170 mA @ 15 V
- Small Signal Gain: 40 dB

DESCRIPTION

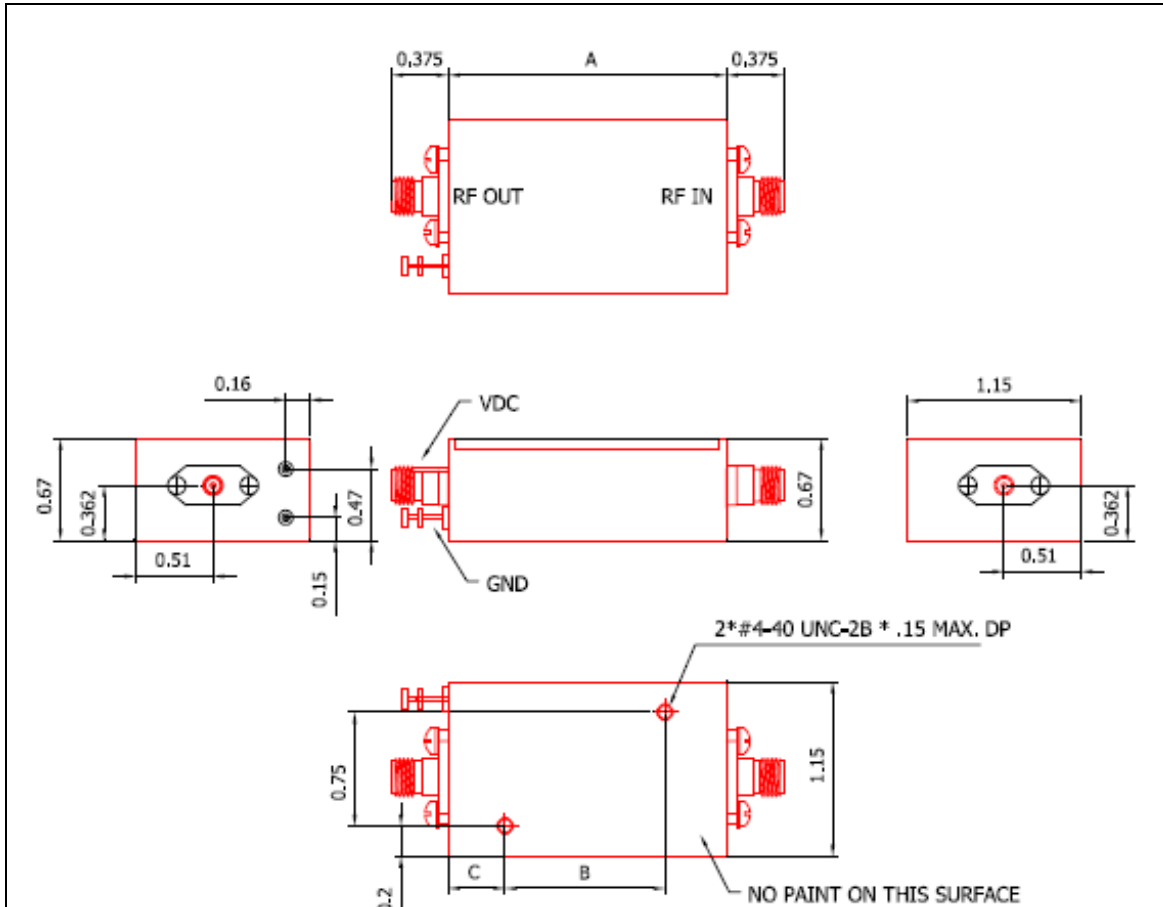
The TA031-035-40-10 is a low noise amplifier designed for application in the 3.1 to 3.5 GHz frequency range. This amplifier utilizes low noise devices that provide excellent noise figure. High efficiency operation is achieved by using hybrid MIC designs and advanced GaAs PHEMT devices. The amplifier requires only a +15V DC power supply.

ELECTRICAL SPECIFICATIONS at 25 °C

Symbol	Description	Min.	Typ.	Max.	Unit
FREQ	Frequency Range	3.1		3.5	GHz
SSG	Small Signal Gain		40		dB
GOF	Small Signal Gain Flatness		± 0.3	± 0.5	dB
P₁ dB	Output Power at 1 dB Gain Compression	10	15		dBm
NF	Noise Figure		1.1	1.2	dB
VSWR, IN	Input VSWR		1.5:1	1.7:1	-
VSWR, OUT	Output VSWR		1.5:1	1.7:1	-
Vdc	DC Supply Voltage(including internal regulator)	10	15	17	Volt
Idc	Current Supply		0.15	0.17	A
OTR	Operating Temperature Range	-30		60	°C

Note – Internal input/output module stages are with balance design.

CASE: HC6, see attached.



CASE	"A" DIM	"B" DIM	"C" DIM
3	1.087	0.500	0.375
4	1.337	0.750	0.375
5	1.587	1.000	0.375
51	1.750	1.125	0.375
6	1.837	1.250	0.418
61	1.837	1.250	0.375
7	2.087	1.500	0.418
71	2.250	1.750	0.250