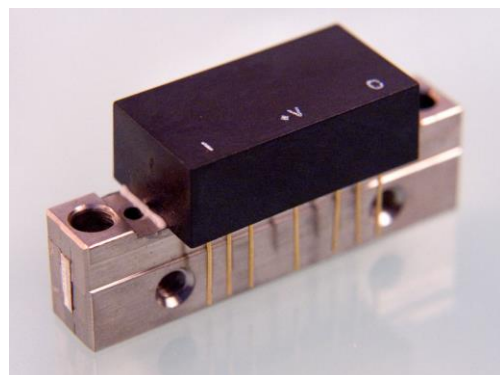


Features: (typical values)

- Output Power – 700mW @ 1dB compression, f=50 MHz
- Very high Gain
- Low Noise Figure – 3.6 dB
- IP3 – 45 dBm @ f = 100 MHz
- IP2 – 75 dBm
- Usable for 50 – 100 ohm systems
- Unconditional Stability
- No external components required

10 – 400 MHz 35 dB CATV Wideband Linear Amplifier



Maximum Ratings

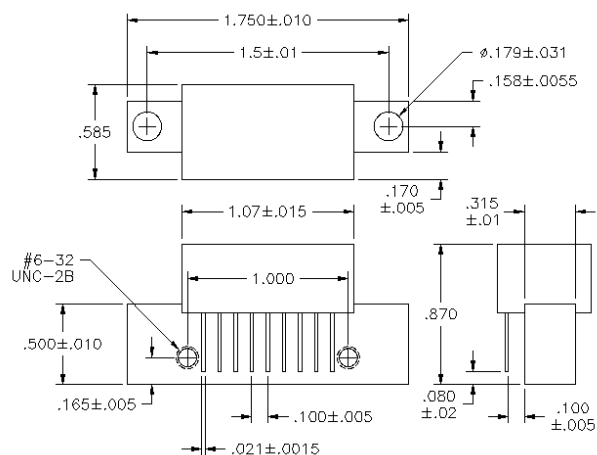
Storage temperature -40°C to +100°C
 DC Operating Voltage +28.0 volts
 RF Input Voltage +5 dBm. Max.
 Operating Base Temp. -20 to +100°C

Specifications @ Tcase = 25°C, Vcc = 24V, 50 ohm systems unless otherwise noted.

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency Range		10	400	MHz.
Power Gain	35	34.0	38.0	dB.
Gain Flatness (peak to peak)	0.5		1.0	dB.
Input VSWR	1.4		2.0:1	-
Output VSWR	1.4		2.0:1	-
Noise Figure(f = 200mhz)	3.6		5.5	dB.
Power Output- 1db Compression	700	500		mW.
Third Order Intercept (IP3)	43	40		dBm.
Second Order Intercept (IP2)	75	60		dBm.
Supply Current	320		340	mA.

Pin Configuration

PIN# Description
 1 Input
 2,3,7,8 Ground
 5 +V.
 9 Output
 4, 6 Not used



FINAL ELECTRICAL TEST REPORT

RECORD DATA @ +25°C ONLY

TEST Vdc +24V	LIMITS 0°C/+25°C/+85°C	ACTUAL DATA
Gain 10 MHz to 400 MHz	36.0 dB min 39.0dB max	37.0 37.9
Gain Flatness 10 MHz to 400 MHz	1.0 dB p-p max	0.9
DC Current at +24 Vdc	360 mA max	335
Input VSWR 10 MHz to 400 MHz	2.0 : 1 max	1.65
Output VSWR 10 MHz to 400 MHz	2.0 : 1 max	1.65
Noise Figure @ 200 MHz	6.5 dB max	3.5
P 1.0 dB Compression 10, 15, 30,400 MHz	27.0 dB min	>29
IP3 with Pout = +15.0 dBm 1) F(1,2)= 11,12 MHz Fc(10, 13 MHz) 2) F(1,2)= 150, 151 MHz Fc(149, 152 MHz) 3) F(1,2)= 398, 399 MHz Fc(397, 400 MHz)	+39.0 dBm min	43.0 45.0 41.0
IP2 with Pout = +15.0 dBm 1) F1-F2= 200-190 MHz Fc(10 MHz) 2) F1+F2= 200 + 190 MHz Fc(390 MHz)	+60.0 dBm min	75 75
Stability Test For all frequency range Where $ S_{21} > 0\text{dB}$	0 dB max	<0

