Specifications

- ***Working frequency range 4,0 –8,0 GHz***
- ***Gain 31 dB***
- ***Noise figure 2,2 dB***
- ***Gain flatness 2,5 dB***
- ***P_1 dB output 8 dBm***
- ***VSWR input/output 1,7/1,7***
- ***Power supply 11,5 – 12,5 V 80 mA***

The broadband amplifier ELU 4080 is designed to operate in input circuits of communication system's receivers, radar systems, satellite TV systems and may be used for amplification of continuous and pulse signals in the range from 4 to 8 GHz. The gain of the unit is minimum 29 dB and output power 5 mW at 1 dB compression.

The amplifier is made on GaAs field transistors. The amplifier is energized by +12 V unipolar power supply. The built-in power supply stabilizer provides protection against polarity reversal.

Structurally the unit is made in a sealed enclosure with coaxial input and output of microwave energy with 3,5/1,5 mm section. Power supply input is also made as a coaxial adapter.

Maximum allowable operating conditions

Parameter , unit of measurement	Value		
	min.	typical	max.
Working frequency range, MHz	4000	—	8000
Maximum allowable input power, mW	—	—	5
Supply voltage (positive), V	11,5	12,0	12,5
Supply voltage ripple, %	—	—	5,0
MTBF, h	10000	-	-
Ambient temperature, ^{o}C	-10	-	+60

Main specifications

Parameter, units of measurement	Value		
	min.	typical	max.
Power gain, dB	29,0	31,0	—
Power gain flatness, dB	—	2,5	3,0
Noise figure, dB	—	2,2	2,5
Power gain decrease at 5 mW output power, dB	—	0,85	1,0
VSWR input/output	—	1,7	2,0
Current consumption, mA	—	—	80

Outline drawing