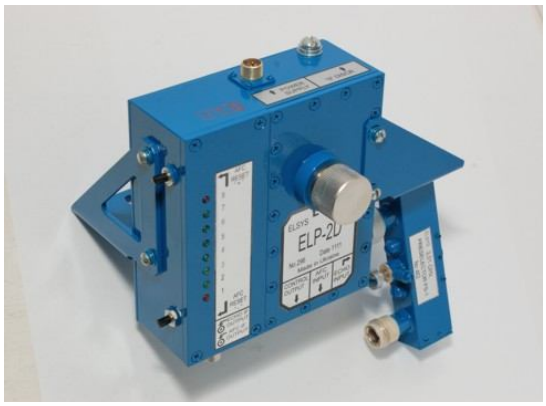
Specifications

- ***Working frequency range 2,7 –3,1 GHz***
- ***Conversion gain 13 dB***
- ***Noise figure (jointly with amplifier MSHB 37R1) 1,8 dB***
- ***Power supply +20 V 250 mA, -20 v 20 mA***



The receiving modules ELP-2A, ELP-2B, ELP-2G, ELP-2D, ELP-2E are intended for use in input circuits of P37 radar receivers jointly with low-noise amplifiers MSHB 37R1. The modules are made in a sealed enclosure and consist of oscillator (stabilized by dielectric resonator), power divider of oscillator with buffer amplifiers, two active mixers, two IF bandpass filters, AFC circuit, display block, power supply and preselector.

The module has electronic frequency adjustment function within ±5 MHz and manual adjustment within ±15 MHZ.

Maximum allowable operating conditions

Parameter, unit	Value		
	min.	typical	max.
Signal pulse power at AFC INPUT, mW ECHO INPUT, mW	 0,1 –	 1,0 –	 10,0 10,0
Supply voltage (positive), V	18	20	22
Supply voltage (negative), V	18	20	22
Supply voltage ripple, %	—	—	5
Working temperature range, °C	-50	—	+60

Main specifications

Parameter, unit	Value		
	min.	typical	max.
Conversion gain from ECHO INPUT to IF ECHO OUTPUT, dB	10,0	13	15,0
Oscillator working frequency, GHz ELP-2A ELP-2B ELP-2G ELP-2D ELP-2E	 – – – – –	 2,68 2,86 2,95 3,04 3,13	 – – – – –
Mechanical adjustment range, MHz	±15	±20	–
Minus 3dB pass band of ECHO channel, MHz	12,0	14,0	15,0
Output power from CONTROL OUTPUT, mW	6	10	14
VSWR of ECHO INPUT and AFC INPUT	—	1,7	2,0
Current consumption in minus 20V supply circuit, mA	–	–	20
Current consumption in plus 20V supply circuit, mA	–	–	250
Noise figure on ECHO channel, dB	—	21,0	24,0
Intermediate frequency, MHz	—	30	—
Electronic adjustment range, MHz	8	10,5	12
Residual error of AFC system, KHz	–	150	350
IF drift in temperature range from minus 50 °C up to plus 60 °C, KHz	–	350	800
Signal amplitude from AFC OUTPUT, mV	20	40	–

Outline drawing