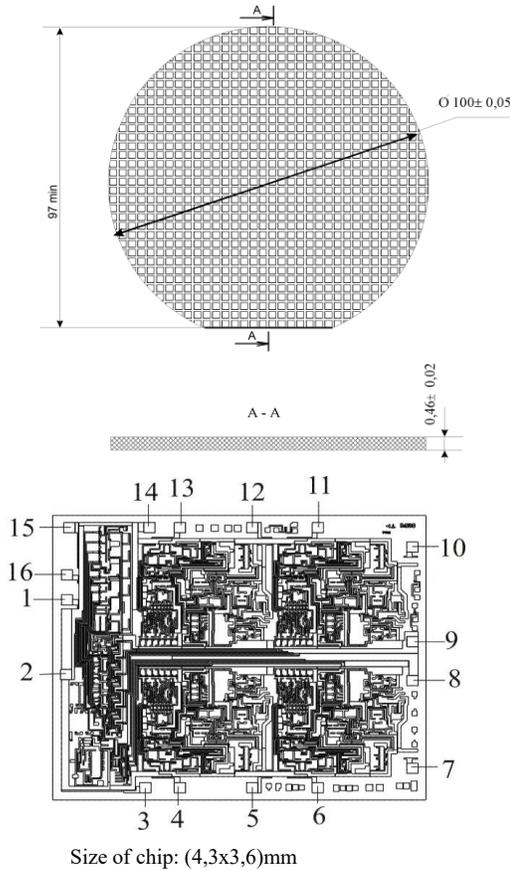


**Four-channel differential amplifier αRD506H4**
**Specification RDM 506D2**


Pin	Pin Destination
1	Logic input 1
2	Power $U_{CC1}$ ( plus )
3	General conclusion of the digital circuit
4	Amplifier input 3
5	Amplifier output 3
6	Amplifier input 4
7	Amplifier output 4
8	General conclusion of the analog circuit, Ground
9	Power $U_{CC2}$ ( minus )
10	Amplifier output 2
11	Amplifier input 2
12	Amplifier output 1
13	Amplifier input 1
14	Logic input 4
15	Logic input 3
16	Logic input 2

Table 2

Control inputs			Transfer ratio
1	3	4	
1	0	0	minus 30
0	0	0	minus 20
X	0	0	minus 20
X	1	0	minus 10
X	0	1	minus 4
X	0	1	minus 2
X	1	1	minus 1

 Electrical Characteristics  $T_A=+25^{\circ}\text{C}$ 

Table 1

Parameter	Max	Min	Units
Zero offset voltage, referred to the output, of each channel, $ U_{OO} $ $U_{CC1}= 12,7\text{V}; U_{CC2}= -12,7\text{V}; R_L=5,5\text{ k}\Omega; K_U=-30$ ; channel inputs - "break"	-	80	mV
Voltage ratio for each channel, $K_U$ $U_{CC1}= 12,7\text{V}; U_{CC2}= -12,7\text{V}; U_o = 6\text{V}; R_L=5,5\text{ k}\Omega$ When changing the code combinations at the logical inputs, the transmission coefficients of the channels must change in accordance with Table 2.	-31,5 -21 -10,5 -4,2 -1,05	-28,5 -19 -9,5 -3,8 -0,95	
Maximum output voltage of each channel, $U_o$ max, $U_{CC1}= 9\text{V}; U_{CC2}= -9\text{V}; U_o = 6\text{V}; R_L=5,5\text{ k}\Omega$	6	-6	V
Supply current, $I_{CC}$ $U_{CC1}= 12,7\text{V}; U_{CC2}= -12,7\text{V}; U_I = 0\text{V}$	-	14	mA
Supply current, $I_{CC}$ $U_{CC1}= 12,7\text{V}; U_{CC2}= -12,7\text{V}; U_I = 0\text{V}$	-14	-	mA
Low level input current on logic inputs, $I_{I1}$ $U_{CC1}= 12,7\text{V}; U_{CC2}= -12,7\text{V}; U_{I\text{ contr}} = 0\text{V}$	-	8	mkA
High level input current on logic inputs, $I_{I2}$ $U_{CC1}= 12,7\text{V}; U_{CC2}= -12,7\text{V}; U_{I\text{ contr}} = 0\text{V}$	-	0,1	mkA
Slew rate of each gain channel, $S_{UOM}$ $U_{CC1}= 9\text{V}; U_{CC2}= -9\text{V}; U_{IS} = -5,4; U_{e} = 5,4\text{V}; R_L = 5,5\text{ k}\Omega; C_L = 10\text{ pF}; K_U = -30$	45	-	V/mks
Output voltage rise time of each channel, $t_r$ $U_{CC1}= 9\text{V}; U_{CC2}= -9\text{V}; U_{I1} = 0\text{V}; U_{I2} = -0,2\text{V}; R_L=5,5\text{ k}\Omega; A_U=-30; C_L = 10\text{ pF}; \epsilon=2\%$	-	270	ns
Zero bias voltage difference, reduced to the output, between channels, $\Delta  U_{OO} $ $U_{CC1}= 12,7\text{V}; U_{CC2}= -12,7\text{V}; R_L=5,5\text{ k}\Omega; K_U=-30$ ; channel inputs - "break"	-	30	mV
The relative change in the transmission coefficients for voltage. between channels, $\Delta K_U$ , $U_{CC1}= 12,7\text{V}; U_{CC2}= -12,7\text{V}; R_L=5,5\text{ k}\Omega; K_U=-10; U_o = 6\text{V}$	-	2,5	%

Microcircuits are made under supervision of Quality Department, checked and there correspond specification