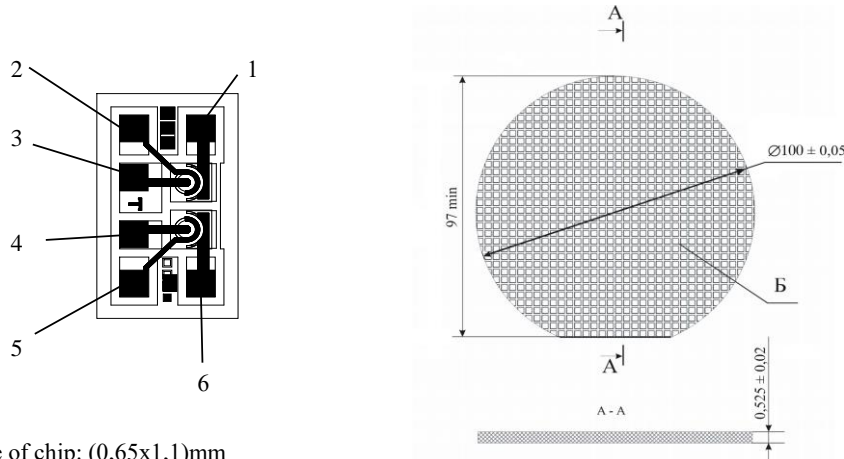


## Basic differential amplifier circuit aRD2713VH4



Size of chip: (0,65x1,1)mm

Pin	Connection	Pin	Connection
1	Collector VT1	4	Collector VT2
2	Base VT1	5	Base VT2
3	Emitter VT1	6	Emitter VT2

## Electrical Characteristics

Parametr	Conditions	$T_A$	Min	Max	Units
Collector Reverse Current	$U_{CB} = 20 \text{ V}$	$+25^\circ\text{C}$	-	10	nA
Reverse Emitter Current	$U_{BE} = 4 \text{ V}$	$+25^\circ\text{C}$	-	20	nA
Initial Collector Current	$U_{CE} = 15 \text{ V}, R_B = 10^4 \Omega$	$+25^\circ\text{C}$	-	20	nA
Leakage Current between transistors	$U_{T1T20} = 25 \text{ V}$	$+25^\circ\text{C}$	-	10	nA
Static Forward Current Transfer Ratio in a Common-Emitter Circuit in Large Signal Mode	$U_{CB} = 5 \text{ V}, f = 50 \text{ Hz}, \tau_u = 2 \text{ ms}$ $I_E = 0,05 \text{ mA}$	$+25^\circ\text{C}$	80	-	
Ratio of Static Forward Current Transfer Coefficients in Common Emitter Circuit in Large Signal Mode	$U_{CB} = 5 \text{ V}, f = 50 \text{ Hz}, \tau_u = 2 \text{ ms}$ $I_E = 0,05 \text{ mA}$	$+25^\circ\text{C}$	0,92		
High Frequency Current Transfer Ratio Module	$U_{CB} = 5 \text{ V}, I_E = 3 \text{ mA}, f = 10^8 \text{ Hz}$	$+25^\circ\text{C}$	4,5	-	
Forward voltage difference modulus emitter-base	$U_{CB} = 5 \text{ V}, I_E = 1 \text{ mA}$	$+25^\circ\text{C}$	-	3	mV
Absolute change in modulus of emitter-base voltage difference	$U_{CB} = 1 \text{ V}, I_E = 1 \text{ mA}$	$-45^\circ\text{C} \div +85^\circ\text{C}$	-	2	mV
Collector junction capacitance	$U_{CB} = 5 \text{ V}, f = 10^7 \text{ Hz}$	$+25^\circ\text{C}$	-	3	pF
Emitter junction capacitance	$U_{BE} = 1 \text{ V}, f = 10^7 \text{ Hz}$	$+25^\circ\text{C}$	-	4	pF
Forward voltage emitter-base transistors	$U_{CE} = 5 \text{ V}, I_E = 1 \text{ mA}$	$+25^\circ\text{C}$	0,55	0,75	V

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