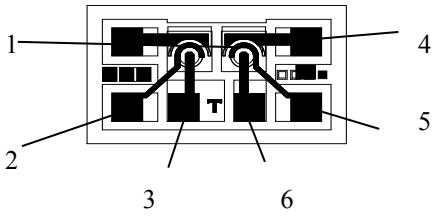
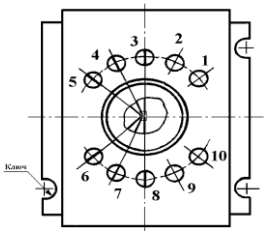
RD ALFA Microelectronics

Basic differential amplifier circuit αRD2713V/K5D

(Marking - 1B)





Pin	Connection
1 (3)	Collector VT2
2 (4)	Base VT2
3 (5)	Emitter VT2
4 (8)	Collector VT1
5 (7)	Base VT1
6 (6)	Emitter VT1

(numbering of tare leads is indicated in brackets)

Electrical Characteristics

Parametr	Conditions	T_A	Min	Max	Units
Collector Reverse Current	U_{CB} = 20 V	+25°C	-	10	nA
		-45°C	-	10	
		+85°C	-	1000	
Reverse Emitter Current	U_{BE} = 4 V	+25°C	-	20	nA
		-45°C	-	20	
		+85°C	-	500	
Initial Collector Current	U_{CE} = 15 V, R_B= 10^4 Ω	+25°C	-	20	nA
		-45°C	-	20	
		+85°C	-	1000	
Leakage Current between transistors	U_{T1T20} = 25 V	+25°C	-	10	nA
		-45°C	-	10	
		+85°C	-	300	
Static Forward Current Transfer Ratio in a Common-Emitter Circuit in Large Signal Mode	U_{CB} = 5V, f= 50 Hz, τu = 2 ms I_E = 0,05 mA	+25°C	80	-	
		-45°C	32	-	
		+85°C	80	-	
	U_{CB} = 5V, f= 50 Hz, τu = 2 ms I_E = 1 mA	+25°C	160	-	
		-45°C	80	-	
		+85°C	240	-	
Ratio of Static Forward Current Transfer Coefficients in Common Emitter Circuit in Large Signal Mode	U_{CB} = 5 V, f= 50 Hz, τu = 2 ms I_E = 0,05 mA	+25°C	0,92	-	
		-45°C	0,8	-	
		+85°C	0,8	-	
	U_{CB} = 5 V, f= 50 Hz, τu = 2 ms I_E = 1 mA	+25°C	0,9	-	
		-45°C	0,85	-	
		+85°C	0,85	-	
High Frequency Current Transfer Ratio Module	U_{CB}= 5V, I_E=3 mA, f= 10^8 Hz	+25°C	4,5	-	
Forward voltage difference modulus emitter-base	U_{CB}= 5V, I_E=1 mA	+25°C	-	3	mV
Absolute change in modulus of emitter-base voltage difference	U_{CB}=1 V, I_E= 1mA	-45°C ÷ + 85 °C	-	2	mV
collector junction capacitance	U_{CB}= 5V, f =10^7 Hz	+25°C	-	3	pF
Emitter junction capacitance	U_{BE}= 1V, f =10^7 Hz	+25°C	-	4	pF
Forward voltage emitter-base transistors	U_{CE}=5V, I_E=1mA	+25°C	0,55	0,75	V

Microcircuits are made under supervision of Quality Departament, checked and there corespond specification

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