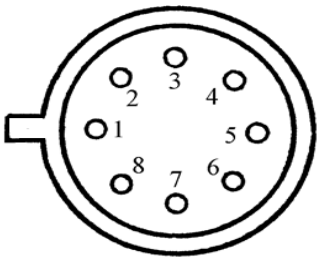
RD ALFA Microelectronics

Basic differential amplifier circuit αRD2713A/C5D



Pin	Connection
2	Collector VT2
3	Base VT2
4	Emitter VT2
6	Collector VT1
7	Base VT1
8	Emitter VT1

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 = 1 mA	+25°C	30	90	
		-45°C	13	90	
		+85°C	30	180	
	U_{CB} = 5V, f= 50 Hz, τu = 2 ms I_E = 0,05 mA	+25°C	50	-	
		-45°C	30	-	
		+85°C	60	-	
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 =1 mA	+25°C	0,9	-	
		-45°C	0,8	-	
		+85°C	0,8	-	
	U_{CB} = 5 V, f= 50 Hz, τu = 2 ms I_E =0,05 mA	+25°C	0,88	-	
		-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	2,5	-	
Forward voltage difference modulus emitter-base	U_{CB}= 5V, I_E=1 mA	+25°C	-	2,5	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
Quality Dept. stamp

240 Maskavas, Riga, LV-1063, Latvia e-mail: info@rdalfa.lv Tel: 371 67109400 Internet: www.rdalfa.lv