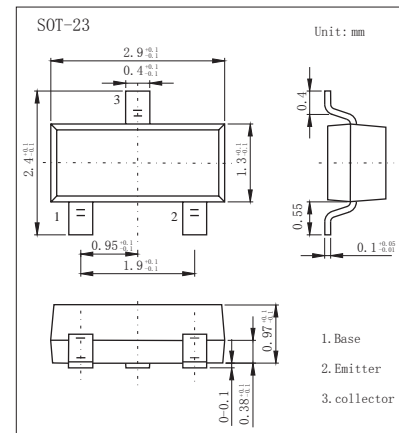


PNP Transistors

2KA2001



■ Features

- Complementary to 2KC1001

■ Absolute Maximum Ratings $T_a = 25$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-40	V
Collector - Emitter Voltage	V_{CE0}	-40	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_c	-0.2	A
Collector Power Dissipation *	P_c	350	mW
Junction Temperature	T_J	150	°C
Storage Temperature range	T_{stg}	-55 to 150	

* Mounted on an FR4 printed-circuit board.

■ Electrical Characteristics $T_a = 25$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_c = -100 \mu A, I_E = 0$	-40			V
Collector- emitter breakdown voltage	V_{CE0}	$I_c = -1 \text{ mA}, I_B = 0$	-40			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu A, I_c = 0$	-6			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -40 \text{ V}, I_E = 0$			-50	nA
Collector- emitter cut-off current	I_{CEX}	$V_{CE} = -30 \text{ V}, V_{EB(off)} = 3 \text{ V}$			-50	
Emitter cut-off current	I_{EBO}	$V_{EB} = -5 \text{ V}, I_c = 0$			-50	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -10 \text{ mA}, I_B = -1 \text{ mA}$			-0.2	V
		$I_c = -50 \text{ mA}, I_B = -5 \text{ mA}$			-0.3	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = -10 \text{ mA}, I_B = -1 \text{ mA}$	-0.65		-0.85	
		$I_c = -50 \text{ mA}, I_B = -5 \text{ mA}$			-0.95	
DC current gain	$h_{fe} (1)$	$V_{CE} = -1 \text{ V}, I_c = -10 \text{ mA}$	100		300	
	$h_{fe} (2)$	$V_{CE} = -1 \text{ V}, I_c = -50 \text{ mA}$	60			
	$h_{fe} (3)$	$V_{CE} = -1 \text{ V}, I_c = -100 \text{ mA}$	30			
Delay time	t_d	$V_{CC} = -3.0 \text{ V}, V_{BE} = 0.5 \text{ V}$			35	ns
Rise time	t_r	$I_c = -10 \text{ mA}, I_{B1} = -1.0 \text{ mA}$			35	
Storage time	t_s	$V_{CC} = -3.0 \text{ V}, I_c = -10 \text{ mA}$			225	
Fall time	t_f	$I_{B1} = I_{B2} = -1.0 \text{ mA}$			75	
Collector input capacitance	C_{ib}	$V_{EB} = -0.5 \text{ V}, I_E = 0, f = 1 \text{ MHz}$			10	pF
Collector output capacitance	C_{ob}	$V_{CB} = -5 \text{ V}, I_E = 0, f = 1 \text{ MHz}$			4.5	
Transition frequency	f_T	$V_{CE} = -20 \text{ V}, I_c = -10 \text{ mA}, f = 100 \text{ MHz}$	250			MHz

■ Marking

Marking	2A
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Typical Characteristics

