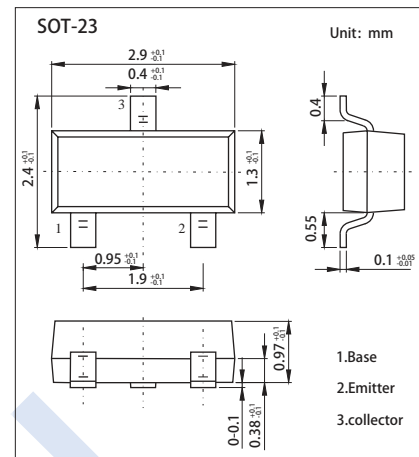


NPN Transistors

2KC1007

■ Features

- Ideally suited for automatic insertion
- For switching and AF amplifier applications



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	30	V
Collector - Emitter Voltage	V_{CE0}	30	
Emitter - Base Voltage	V_{EB0}	6	
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150	

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■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = 100 μA, I _E = 0	30			V
Collector- emitter breakdown voltage	V _{CE0}	I _c = 1 mA, I _B = 0	30			
Emitter - base breakdown voltage	V _{EB0}	I _E = 100 μA, I _c = 0	6			
Collector-base cut-off current	I _{CB0}	V _{CB} = 30 V, I _E = 0			100	nA
Collector- emitter cut-off current	I _{CE0}	V _{CE} = 30 V, I _E = 0			1	uA
Emitter cut-off current	I _{EB0}	V _{EB} = 5V, I _c =0			100	nA
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =100 mA, I _B =5mA			0.4	V
Base - emitter saturation voltage	V _{BE(sat)}	I _c =100 mA, I _B =5mA			1.1	
DC current gain	h _{FE}	V _{CE} = 5V, I _c = 2mA	200		450	
Collector output capacitance	C _{ob}	V _{CB} = 10V, f= 1 MHz			4.5	pF
Transition frequency	f _T	V _{CE} = 5V, I _c = 10mA, f=100MHz	100			MHz

■ Marking

Marking	3B
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Typical Characteristics

