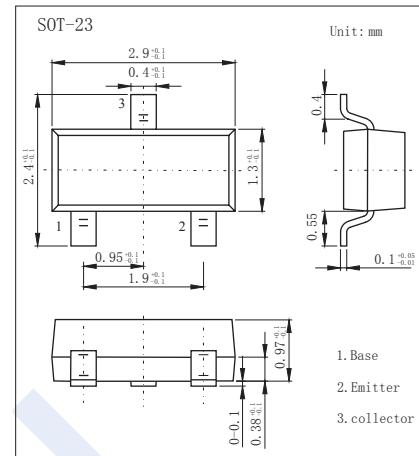


NPN Transistors

KST8050X

■ Features

- Collector Power Dissipation: $P_c=0.3W$
- Collector Current: $I_c=1.5A$



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

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	40	V
Collector-Emitter Voltage	V_{CE0}	20	V
Emitter-Base Voltage	V_{EB0}	5	V
Collector Current -Continuous	I_c	1.5	A
Collector Power Dissipation	P_c	0.3	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to 150	$^\circ C$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_c = 100 \mu A, I_E = 0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_c = 1mA, I_B = 0$	20		40	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100 \mu A, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 40V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			0.1	μA
DC current gain	h_{FE}	$V_{CE} = 1V, I_c = 100mA$	200		350	
		$V_{CE} = 1V, I_c = 800mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = 800mA, I_B = 80mA$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_c = 800mA, I_B = 80mA$			1.2	V
Output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$			20	pF
Transition frequency	f_T	$V_{CE} = 6V, I_c = 20mA, f = 30MHz$	100			MHz

■ Marking

Marking	Y1+

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KST8050X

Typical Characteristics

