



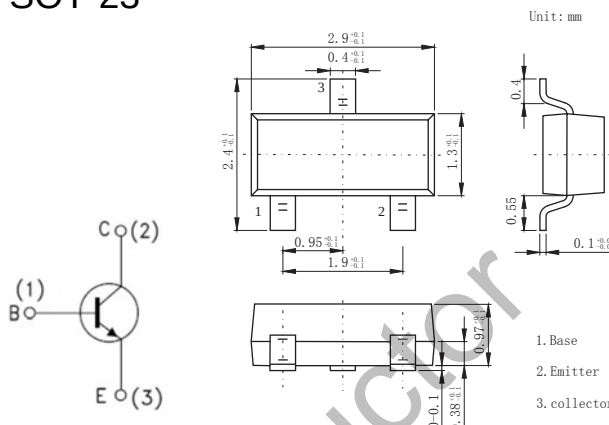
S8050

Features:

- ☐ Complimentary to S8550
- ☐ Collector Current: $I_C=0.5A$

Marking: J3Y

SOT-23

Absolute Maximum Ratings* ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
BV_{CBO}	Collector-Base Voltage	40	V
BV_{CEO}	Collector-Emitter Voltage	25	V
$BVEBO$	Emitter-Base Voltage	5	V
I_C	Collector Current	0.5	A
P_D	Collector Power Dissipation	0.3	W
T_j, T_{stg}	Junction and Storage Temperature	-55~+150	$^\circ\text{C}$

Electrical Characteristics* ($T_a=25^\circ\text{C}$ unless otherwise noted)

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	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	25			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
Collector cut-off current	I_{CEO}	$V_{CB}=20V, I_E=$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=1V, I_C=50mA$	120		400	
	$h_{FE(2)}$	$V_{CE}=1V, I_C=500mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$			0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=500mA, I_B=50mA$			1.2	V
Transition frequency	f_T	$V_{CE}=6V, I_C=20mA$ $f=30MHz$	150			MHz

Classification Of h_{FE}

Classification	L	H	J
h_{FE1}	120-200	200-350	300-400

* Pulse Test: Pulse Width=20 μs , Duty Cycle $\leq 2\%$

Typical Characteristics

