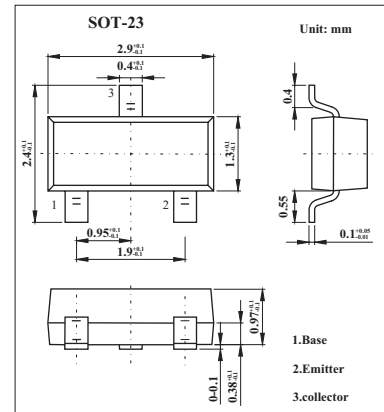


Silicon PNP Epitaxial Planar Type

2SB710

■ Features

- Large collector current I_c .
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

■ 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}	-25	V
Emitter-base voltage	V_{EB0}	-5	V
Collector current	I_c	-0.5	A
Peak collector current	I_{CP}	-1	A
Collector power dissipation	P_c	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base voltage	V_{CB0}	$I_c = -10 \mu\text{A}$, $I_E = 0$	-30			V
Collector-emitter voltage	V_{CE0}	$I_c = -10 \text{mA}$, $I_B = 0$	-25			V
Emitter-base voltage	V_{EB0}	$I_E = -10 \mu\text{A}$, $I_c = 0$	-5			V
Collector-base cutoff current	I_{CBO}	$V_{CB} = -20 \text{V}$, $I_E = 0$			-0.1	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = -10 \text{V}$, $I_c = -150 \text{mA}$	85		340	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -300 \text{mA}$, $I_B = -30 \text{mA}$		-0.35	-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_c = -300 \text{mA}$, $I_B = -30 \text{mA}$		-1.1	-1.5	V
Transition frequency	f_T	$V_{CB} = -10 \text{V}$, $I_E = 50 \text{mA}$, $f = 200 \text{MHz}$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10 \text{V}$, $I_E = 0$, $f = 1.0 \text{MHz}$		6	15	pF

■ h_{FE} Classification

Marking	CQ	CR	CS
h_{FE}	85~170	120~240	170~340