

2SB710, 2SB710A

Silicon PNP epitaxial planer type

For general amplification

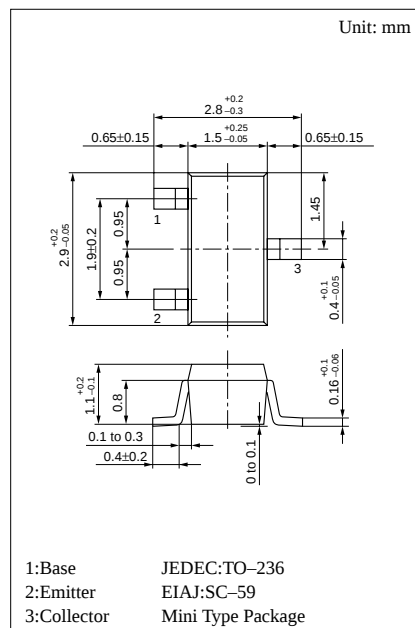
Complementary to 2SD602 and 2SD602A

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 (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	2SB710	-30	V
	2SB710A		
Collector to emitter voltage	2SB710	-25	V
	2SB710A		
Emitter to base voltage	V_{EBO}	-5	V
Peak collector current	I_{CP}	-1	A
Collector current	I_C	-0.5	A
Collector power dissipation	P_C	200	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 ~ +150	°C



Marking symbol : C(2SB710)
D(2SB710A)

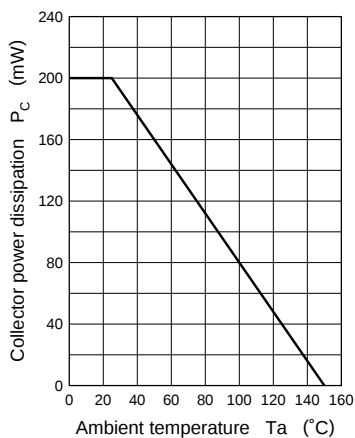
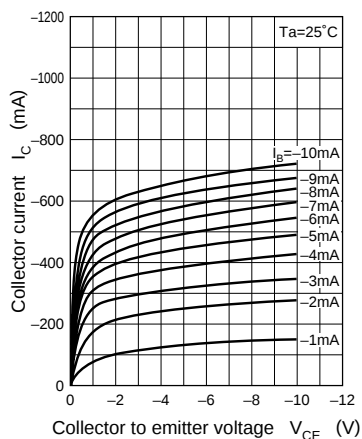
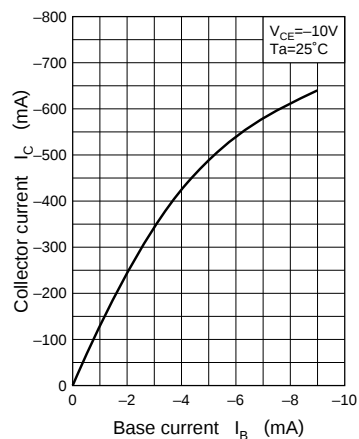
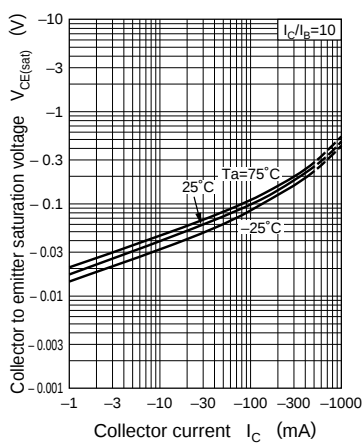
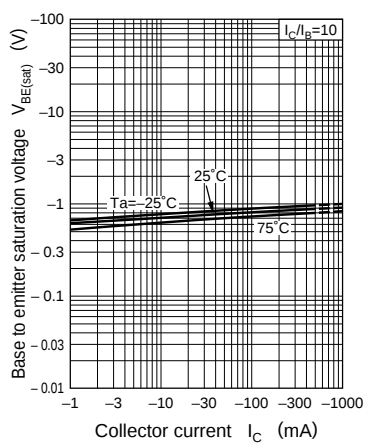
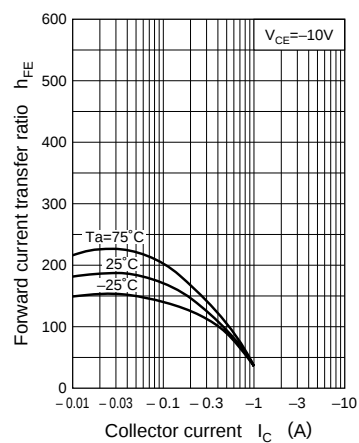
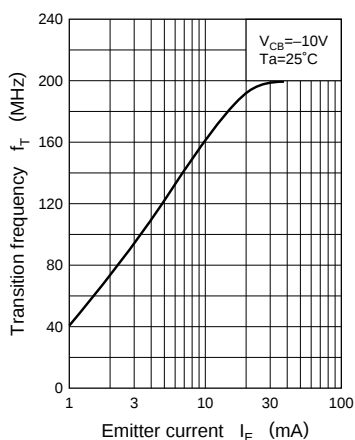
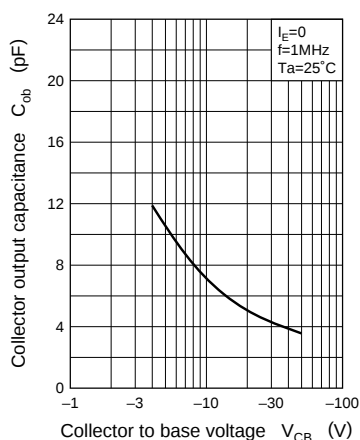
Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -20V, I_E = 0$			-0.1	μA
Collector to base voltage	2SB710	$I_C = -10\mu A, I_E = 0$	-30			V
	2SB710A		-60			
Collector to emitter voltage	2SB710	$I_C = -10mA, I_B = 0$	-25			V
	2SB710A		-50			
Emitter to base voltage	V_{EBO}	$I_E = -10\mu A, I_C = 0$	-5			V
Forward current transfer ratio	h_{FE1}^{*1}	$V_{CE} = -10V, I_C = -150mA^{*2}$	85		340	
	h_{FE2}	$V_{CE} = -10V, I_C = -500mA^{*2}$	40			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -300mA, I_B = -30mA^{*2}$		-0.35	-0.6	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = -300mA, I_B = -30mA^{*2}$		-1.1	-1.5	V
Transition frequency	f_T	$V_{CB} = -10V, I_E = 50mA, f = 200MHz$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		6	15	pF

^{*2} Pulse measurement

^{*1} h_{FE1} Rank classification

Rank		Q	R	S
h _{FE1}		85 ~ 170	120 ~ 240	170 ~ 340
Marking Symbol	2SB710	CQ	CR	CS
	2SB710A	DQ	DR	DS

$P_C - T_a$  $I_C - V_{CE}$  $I_C - I_B$  $V_{CE(sat)} - I_C$  $V_{BE(sat)} - I_C$  $h_{FE} - I_C$  $f_T - I_E$  $C_{ob} - V_{CB}$  $V_{CER} - R_{BE}$ 