2SB0709A (2SB709A)

Silicon PNP epitaxial planer type

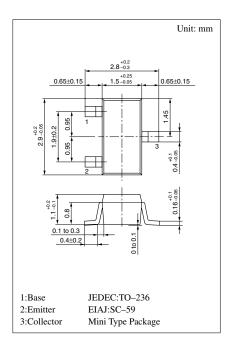
For general amplification
Complementary to 2SD0601A (2SD601A)

Features

- High foward current transfer ratio h_{FE}.
- 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	V_{CBO}	-45	V
Collector to emitter voltage	V_{CEO}	-45	V
Emitter to base voltage	V_{EBO}	-7	V
Peak collector current	I_{CP}	-200	mA
Collector current	I_{C}	-100	mA
Collector power dissipation	P _C	200	mW
Junction temperature	T_{j}	150	°C
Storage temperature	T_{stg}	−55 ~ +150	°C



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	μΑ
	I_{CEO}	$V_{CE} = -10V, I_B = 0$			-100	μΑ
Collector to base voltage	V _{CBO}	$I_{\rm C} = -10\mu A, I_{\rm E} = 0$	-45			V
Collector to emitter voltage	V _{CEO}	$I_{\rm C} = -2mA, I_{\rm B} = 0$	-45			V
Emitter to base voltage	V _{EBO}	$I_{\rm E} = -10\mu A, I_{\rm C} = 0$	-7			V
Forward current transfer ratio	h _{FE} *	$V_{CE} = -10V, I_{C} = -2mA$	160		460	
Collector to emitter saturation voltage	V _{CE(sat)}	$I_C = -100 \text{mA}, I_B = -10 \text{mA}$		- 0.3	- 0.5	V
Transition frequency	f_{T}	$V_{CB} = -10V$, $I_E = 1$ mA, $f = 200$ MHz		80		MHz
Collector output capacitance	C _{ob}	$V_{CB} = -10V$, $I_E = 0$, $f = 1MHz$		2.7		pF

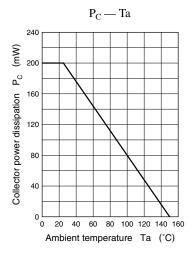
*1hFE Rank classification

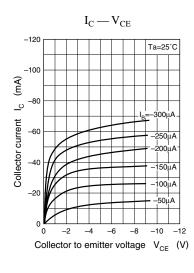
Rank	Q	R	S
h_{FE}	160 ~ 260	210 ~ 340	290 ~ 460
Marking Symbol	BQ	BR	BS

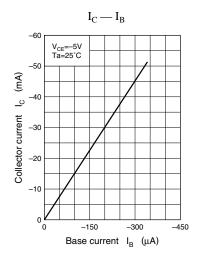
Note.) The Part number in the Parenthesis shows conventional part number.

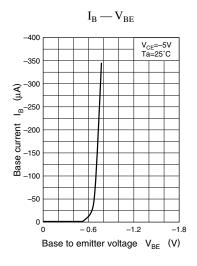
Panasonic 1

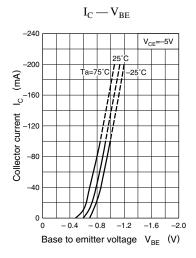
Transistor 2SB0709A

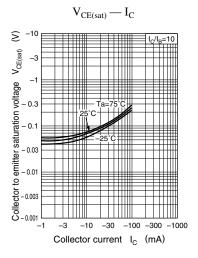


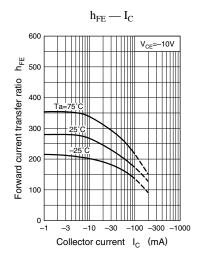


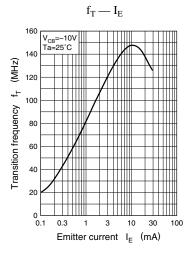


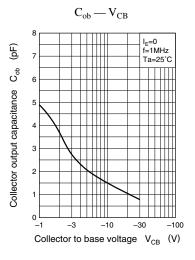




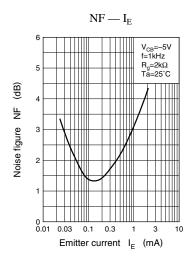


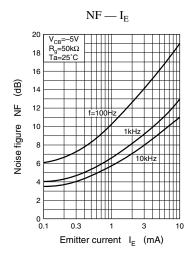


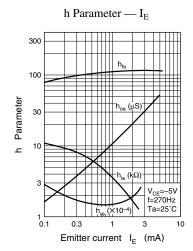


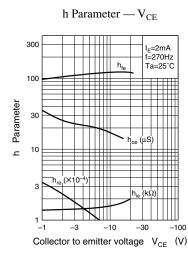


Transistor 2SB0709A









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