

2SB902

Silicon PNP Epitaxial Planar Type

For general amplification

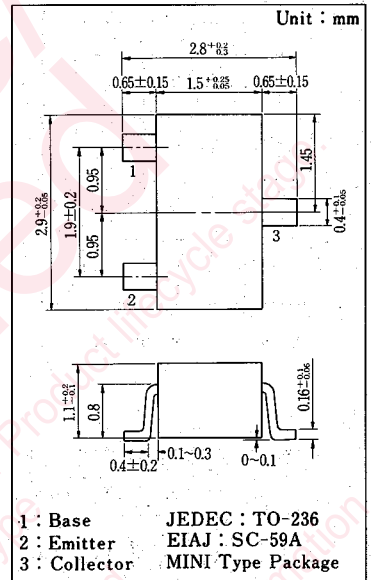
■ Features

- High emitter-base voltage V_{EBO}
- Low collector-emitter saturation voltage $V_{CE(sat)}$
- As it is a MINI type package, downsizing of equipment and automatic insertion by taping and magazine packaging are possible.

■ Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Item	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-30	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-15	V
Peak Collector Voltage	I_{CP}	-200	mA
Collector Current	I_C	-100	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

■ Package Dimensions



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

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = -10\text{ V}, I_E = 0$			-1	μA
	I_{CEO}	$V_{CE} = -20\text{ V}, I_B = 0$			-100	
Collector-Base Voltage	V_{CBO}	$I_C = -10\ \mu\text{A}, I_E = 0$	-30			V
Collector-Emitter Voltage	V_{CEO}	$I_C = -2\text{ mA}, I_B = 0$	-25			V
Emitter-Base Voltage	V_{EBO}	$I_E = -10\ \mu\text{A}, I_C = 0$	-15			V
DC Current Gain	h_{FE1}^*	$V_{CE} = -10\text{ V}, I_C = -2\text{ mA}$	160		460	
	h_{FE2}	$V_{CE} = -2\text{ V}, I_C = -100\text{ mA}$	90			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100\text{ mA}, I_B = -10\text{ mA}$			-0.5	V
Transition Frequency	f_T	$V_{CB} = -10\text{ V}, I_E = 2\text{ mA}, f = 200\text{ MHz}$		150		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10\text{ V}, I_E = 0, f = 1\text{ MHz}$		4		pF

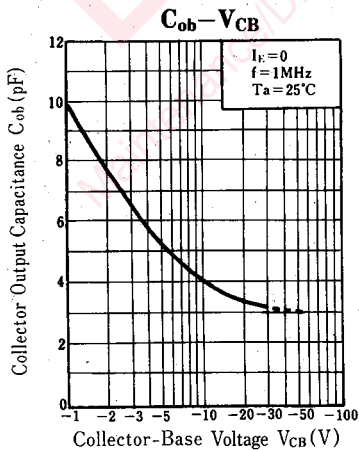
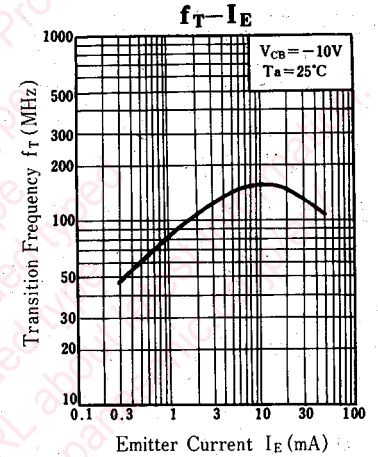
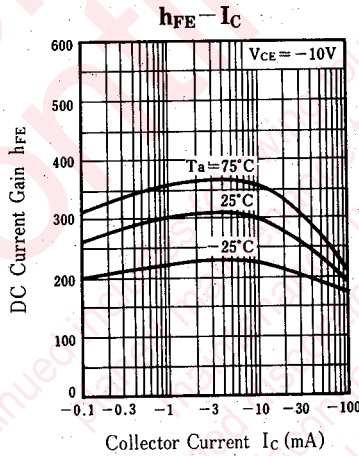
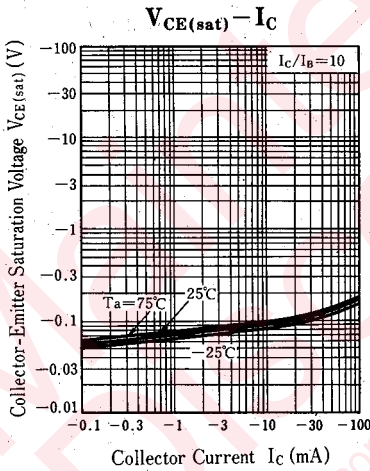
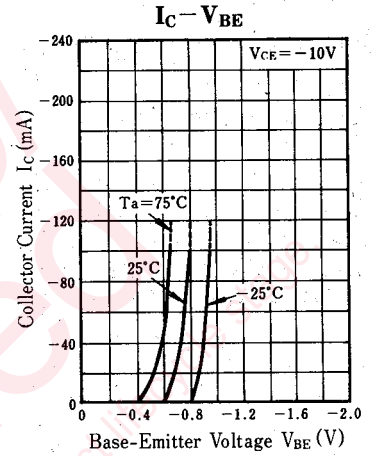
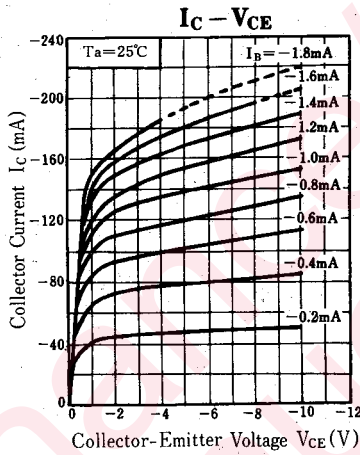
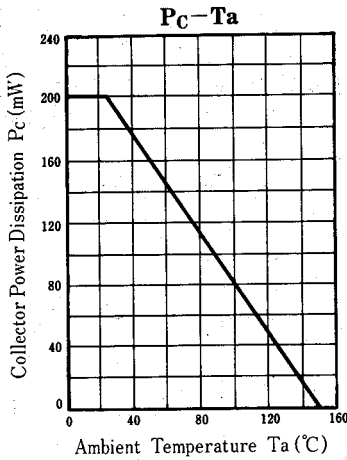
* h_{FE1} Ranking

Rank	Q	R	S
h_{FE1}	160 ~ 260	210 ~ 340	290 ~ 460
Marking	1CQ	1CR	1CS

■ Type Name Marking (Example)

Type No. h_{FE} Ranking





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