

# 2SA1791

## Silicon PNP epitaxial planar type

For low-frequency amplification

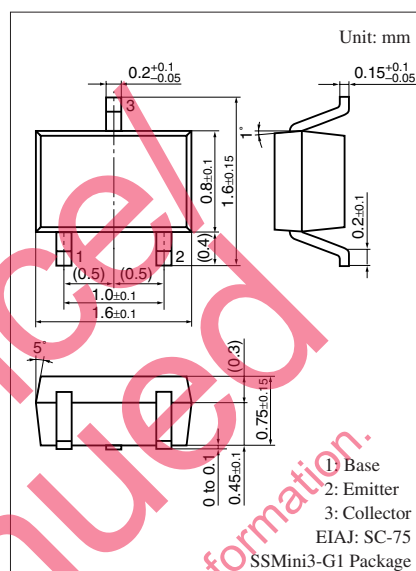
Complementary to 2SC4656

### ■ Features

- High forward current transfer ratio  $f_T$
- Small collector output capacitance  $C_{ob}$
- SS-Mini type package allowing downsizing of the equipment and automatic insertion through the tape packing

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	-50	V
Collector-emitter voltage (Base open)	$V_{CEO}$	-50	V
Emitter-base voltage (Collector open)	$V_{EBO}$	-5	V
Collector current	$I_C$	-50	mA
Collector power dissipation	$P_C$	125	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$



Marking Symbol: AL

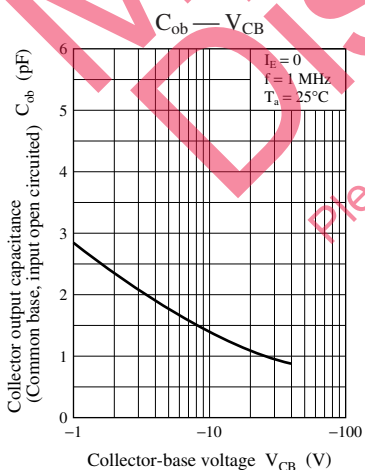
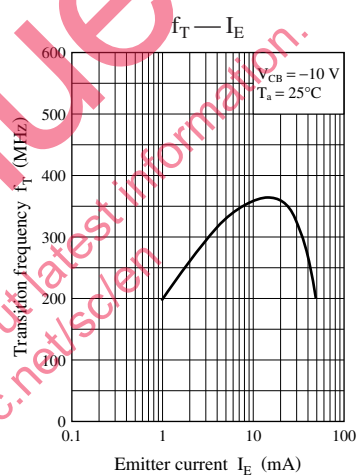
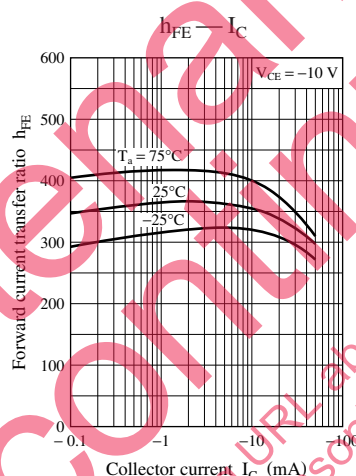
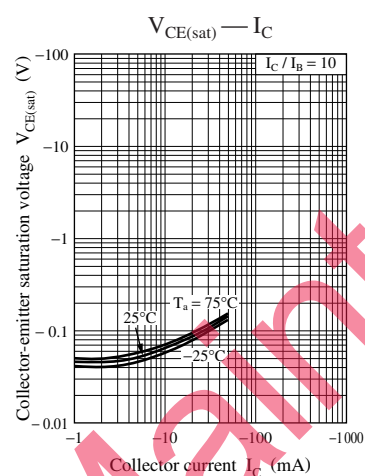
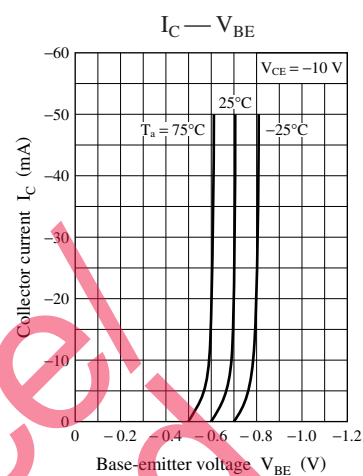
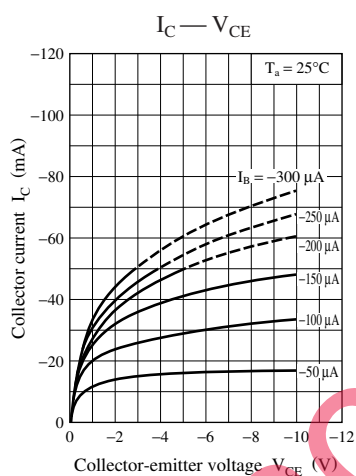
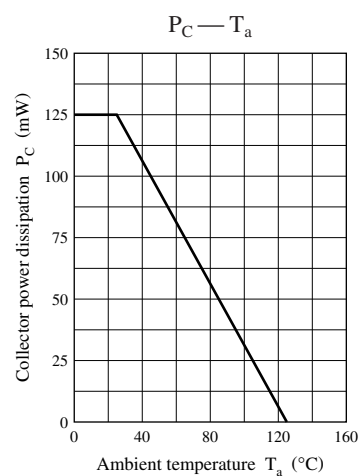
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	$I_C = -10\ \mu\text{A}$ , $I_E = 0$	-50			V
Collector-emitter voltage (Base open)	$V_{CEO}$	$I_C = -1\ \text{mA}$ , $I_B = 0$	-50			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = -10\ \mu\text{A}$ , $I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -10\ \text{V}$ , $I_E = 0$			-0.1	$\mu\text{A}$
Collector-emitter cutoff current (Base open)	$I_{CEO}$	$V_{CE} = -10\ \text{V}$ , $I_B = 0$			-100	$\mu\text{A}$
Forward current transfer ratio *	$h_{FE}$	$V_{CE} = -10\ \text{V}$ , $I_C = -2\ \text{mA}$	200		500	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10\ \text{mA}$ , $I_B = -1\ \text{mA}$		-0.1	-0.3	V
Transition frequency	$f_T$	$V_{CB} = -10\ \text{V}$ , $I_E = 2\ \text{mA}$ , $f = 200\ \text{MHz}$		250		MHz
Collector output capacitance (Common base, input open circuited)	$C_{ob}$	$V_{CB} = -10\ \text{V}$ , $I_E = 0$ , $f = 1\ \text{MHz}$		1.5		pF

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. \*: Rank classification

Rank	Q	R
$h_{FE}$	200 to 400	250 to 500



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