# 2SA1791

## Silicon PNP epitaxial planar type

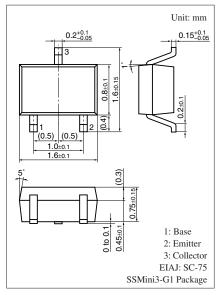
For low-frequency amplification Complementary to 2SC4656

### ■ Features

- High forward current transfer ratio f<sub>T</sub>
- $\bullet$  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 $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	-50	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-50	V	
Emitter-base voltage (Collector open)	$V_{EBO}$	-5	V	
Collector current	$I_C$	-50	mA	
Collector power dissipation	P <sub>C</sub>	125	mW	
Junction temperature	$T_j$	125	°C	
Storage temperature	T <sub>stg</sub>	-55 to +125	°C	



Marking Symbol: AL

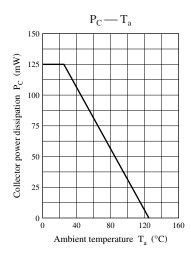
## $\blacksquare$ Electrical Characteristics $T_a = 25 ^{\circ}C \pm 3 ^{\circ}C$

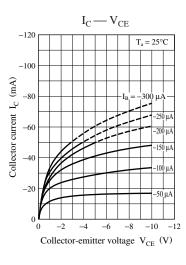
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_C = -10 \mu A, I_E = 0$	-50			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_C = -1 \text{ mA}, I_B = 0$	-50			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = -10 \ \mu A, I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -10 \text{ V}, I_E = 0$			- 0.1	μΑ
Collector-emitter cutoff current (Base open)	$I_{CEO}$	$V_{CE} = -10 \text{ V}, I_B = 0$			-100	μΑ
Forward current transfer ratio *	$h_{FE}$	$V_{CE} = -10 \text{ V}, \ I_{C} = -2 \text{ mA}$	200		500	_
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$		- 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	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		1.5		pF
(Common base, input open circuited)						

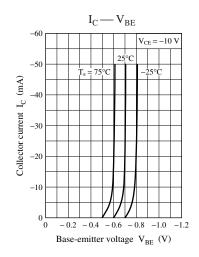
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

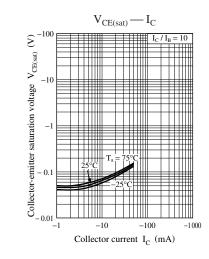
### 2. \*: Rank classification

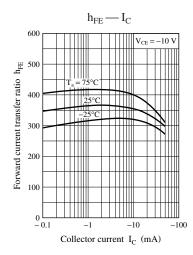
Rank	Q	R
$h_{FE}$	200 to 400	250 to 500

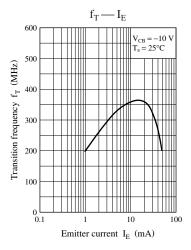


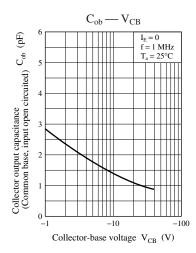












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