# 2SC2295

## Silicon NPN epitaxial planar type

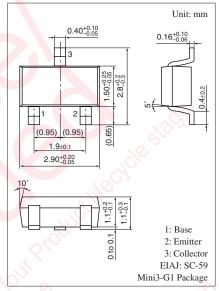
For high-frequency amplification Complementary to 2SA1022

#### ■ Features

- Optimum for RF amplification of FM/AM radios
- High transition frequency f<sub>T</sub>
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing

### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	$V_{CBO}$	30	V	
Collector-emitter voltage (Base open)	$V_{CEO}$	20	V	
Emitter-base voltage (Collector open)	$V_{EBO}$	5	V	
Collector current	$I_{C}$	30	mA	
Collector power dissipation	P <sub>C</sub>	200	mW	
Junction temperature	T <sub>j</sub>	150	°C	
Storage temperature	T <sub>stg</sub>	-55 to +150	°C	



Marking Symbol: V

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

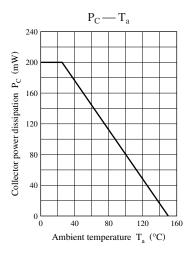
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = 10 \text{ V}, I_{E} = 0$	100	250	0.1	μΑ
Forward current transfer ratio *	$h_{FE}$	$V_{CB} = 10 \text{ V}, I_{E} = -1 \text{ mA}$	70		220	_
Transition frequency	$f_T$	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 200 \text{ MHz}$	150	250		MHz
Noise figure	NF	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 5 \text{ MHz}$		2.8	4.0	dB
Reverse transfer impedance	Z <sub>rb</sub>	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 2 \text{ MHz}$		22	50	Ω
Reverse transfer capacitance	C <sub>re</sub>	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 10.7 \text{ MHz}$		0.9	1.5	pF
(Common emitter)		" 10 'Y.				

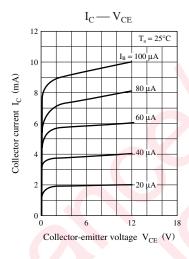
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

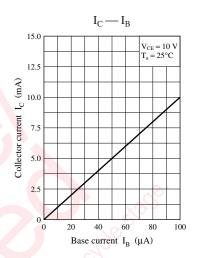
#### 2. \*: Rank classification

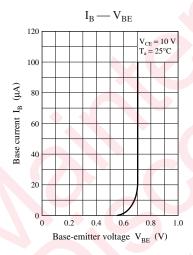
Rank	В	C
$h_{FE}$	70 to 140	110 to 220

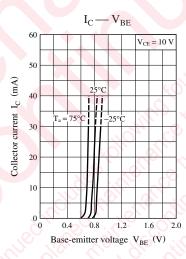
## **Panasonic**

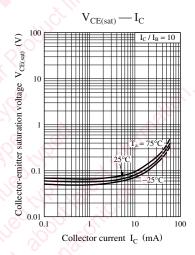


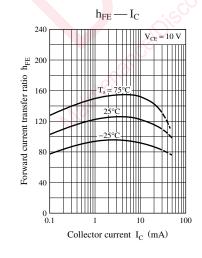


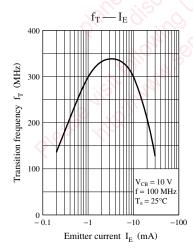


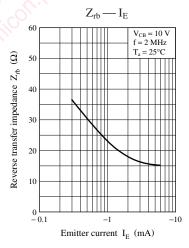




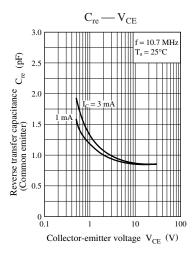


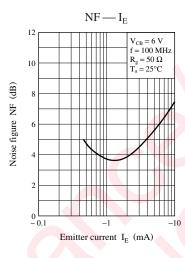


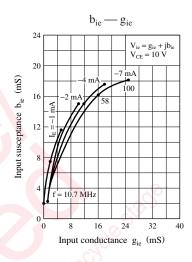


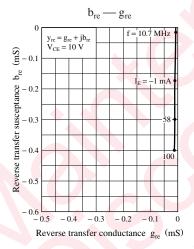


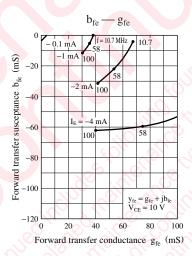
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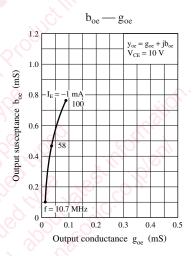












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