

## 2SC4627J

## Silicon NPN epitaxial planar type

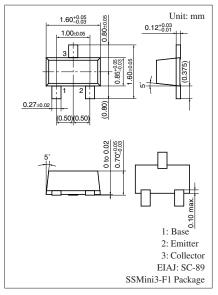
#### For high-frequency amplification

#### ■ Features

- Optimum for RF amplification of FM/AM radios
- High transition frequency f<sub>T</sub>
- 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>	30	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	20	V	
Emitter-base voltage (Collector open)	$V_{EBO}$	3	V	
Collector current	$I_C$	15	mA	
Collector power dissipation	P <sub>C</sub>	125	mW	
Junction temperature	$T_{j}$	125	°C	
Storage temperature	$T_{stg}$	-55 to +125	°C	



Marking Symbol: U

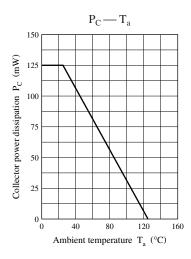
### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

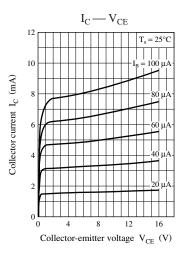
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_C = 10 \ \mu A, I_E = 0$	30			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = 10 \ \mu A, I_C = 0$	3			V
Base-emitter voltage	$V_{BE}$	$V_{CB} = 6 \text{ V}, I_{E} = -1 \text{ mA}$		720		mV
Forward current transfer ratio *	$h_{FE}$	$V_{CB} = 6 \text{ V}, I_{E} = -1 \text{ mA}$	65		160	_
Transition frequency	$f_T$	$V_{CB} = 6 \text{ V}, I_E = -1 \text{ mA}, f = 200 \text{ MHz}$	450	650		MHz
Reverse transfer capacitance	C <sub>re</sub>	$V_{CB} = 6 \text{ V}, I_E = -1 \text{ mA}, f = 10.7 \text{ MHz}$		0.8	1.0	pF
(Common emitter)						
Power gain	PG	$V_{CB} = 6 \text{ V}, I_E = -1 \text{ mA}, f = 100 \text{ MHz}$		24		dB
Noise figure	NF	$V_{CB} = 6 \text{ V}, I_E = -1 \text{ mA}, f = 100 \text{ MHz}$		3.3		dB

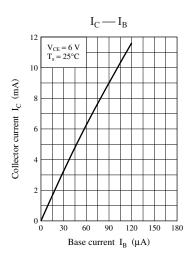
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

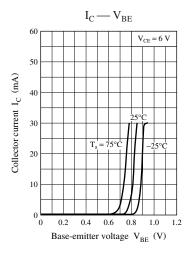
#### 2. \*: Rank classification

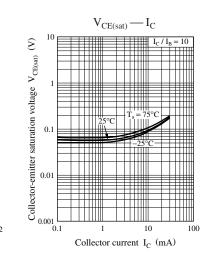
Rank	С		
$h_{FE}$	65 to 160		

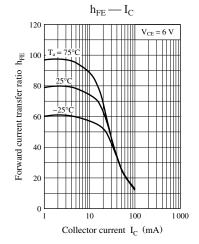


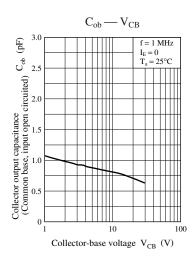












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