

# 2SC2480

## Silicon NPN epitaxial planar type

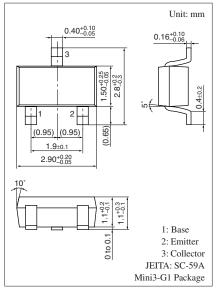
For high-frequency amplification/oscillation/mixing

#### ■ Features

- 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 <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	$I_C$	50	mA	
Collector power dissipation	P <sub>C</sub>	150	mW	
Junction temperature	$T_{j}$	150	°C	
Storage temperature	$T_{stg}$	-55 to +150	°C	



Marking Symbol: R

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

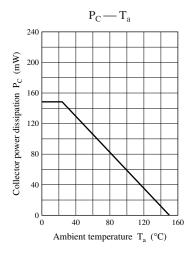
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_C = 100 \ \mu A, I_E = 0$	30			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = 10 \ \mu A, I_C = 0$	3			V
Base-emitter voltage	$V_{BE}$	$V_{CB} = 10 \text{ V}, I_E = -2 \text{ mA}$		720		mV
Forward current transfer ratio	$h_{FE}$	$V_{CB} = 10 \text{ V}, I_E = -2 \text{ mA}$	25		250	_
Transition frequency *	$f_T$	$V_{CB} = 10 \text{ V}, I_E = -15 \text{ mA}, f = 200 \text{ MHz}$	800	1 300	1600	MHz
Reverse transfer capacitance (Common base)	$C_{rb}$	$V_{CE} = 6 \text{ V}, I_{C} = 0, f = 1 \text{ MHz}$		0.8		pF
Reverse transfer capacitance (Common emitter)	C <sub>re</sub>	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 10.7 \text{ MHz}$		1.0	1.5	pF
Power gain	G <sub>P</sub>	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 200 \text{ MHz}$		20		dB

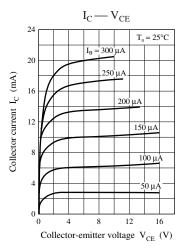
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

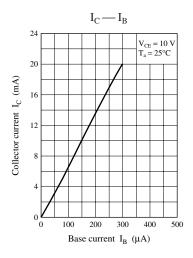
#### 2. \*: Rank classification

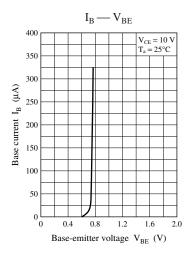
Rank	ank T S		No-rank
$f_T$	800 to 1400	1000 to 1600	800 to 1600
Marking symbol	RT	RS	R

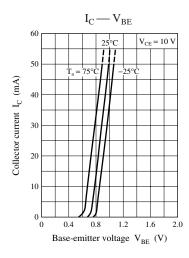
Product of no-rank is not classified and have no indication for rank.

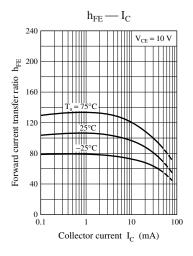


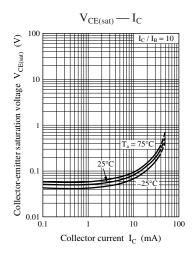


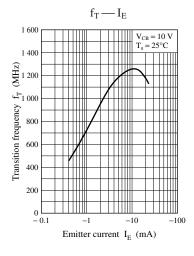


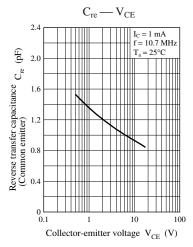


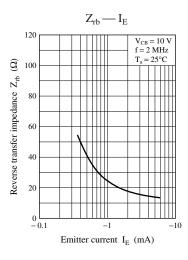


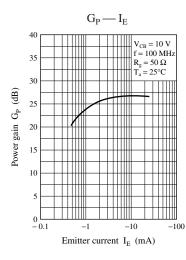


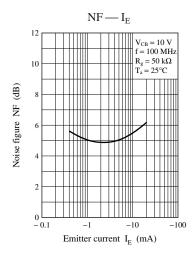


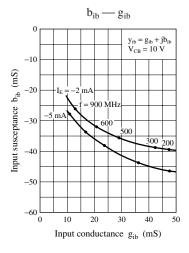


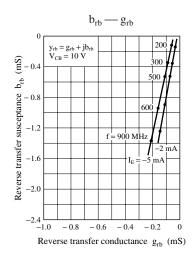


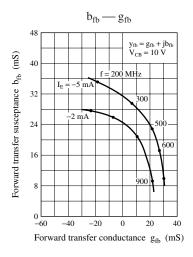


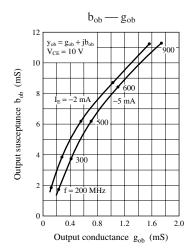












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