

Transistor

**Panasonic**

# 2SC4627J

Silicon NPN epitaxial planer type

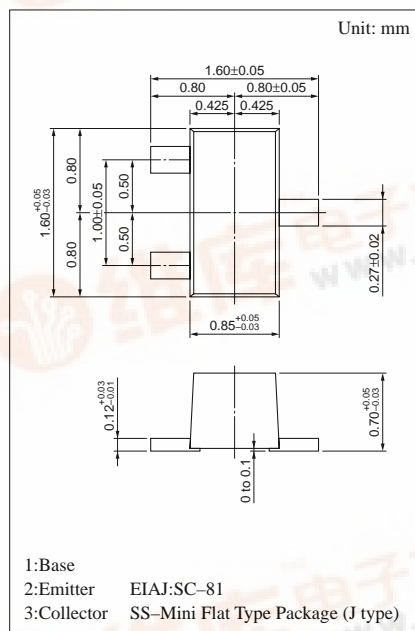
For high-frequency amplification

## Features

- Optimum for RF amplification of FM/AM radios.
- High transition frequency  $f_T$ .
- SS-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing. (Flat type)

## Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	30	V
Collector to emitter voltage	$V_{CEO}$	20	V
Emitter to base voltage	$V_{EBO}$	3	V
Collector current	$I_C$	15	mA
Collector power dissipation	$P_C$	125	mW
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 ~ +125	°C

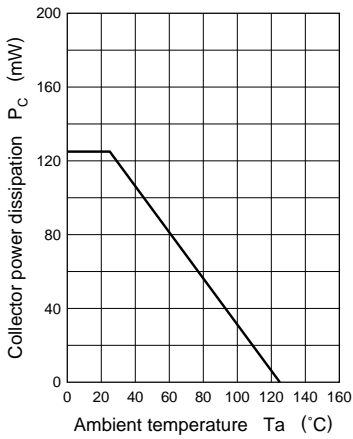


Marking symbol : U

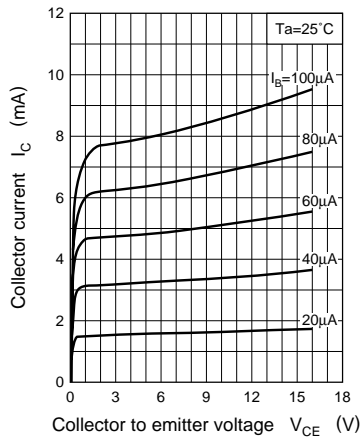
## Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	$V_{CBO}$	$I_C = 10\mu A, I_E = 0$	30			V
Emitter to base voltage	$V_{EBO}$	$I_E = 10\mu A, I_C = 0$	3			V
Forward current transfer ratio	$h_{FE}$	$V_{CB} = 6V, I_E = -1mA$	40		260	
Base to emitter voltage	$V_{BE}$	$V_{CB} = 6V, I_E = -1mA$		720		mV
Common emitter reverse transfer capacitance	$C_{re}$	$V_{CB} = 6V, I_E = -1mA, f = 10.7MHz$		0.8	1	pF
Transition frequency	$f_T$	$V_{CB} = 6V, I_E = -1mA, f = 200MHz$		450	650	MHz
Noise figure	NF	$V_{CB} = 6V, I_E = -1mA, f = 100MHz$		3.3		dB
Power gain	PG	$V_{CB} = 6V, I_E = -1mA, f = 100MHz$		24		dB

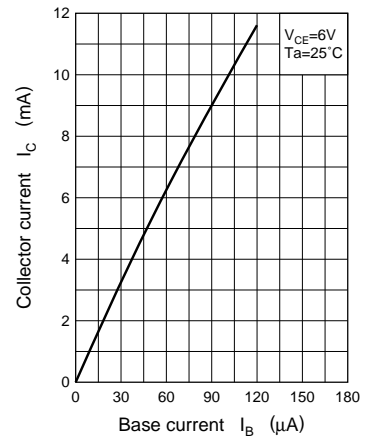
$P_C - T_a$



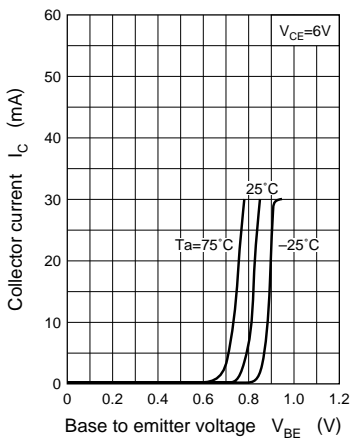
$I_C - V_{CE}$



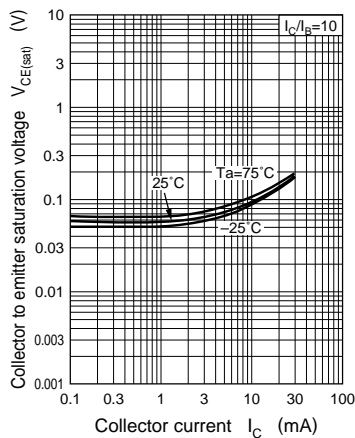
$I_C - I_B$



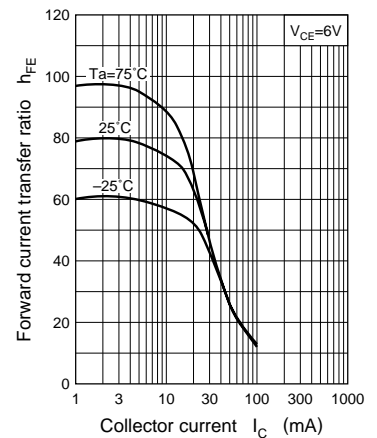
$I_C - V_{BE}$



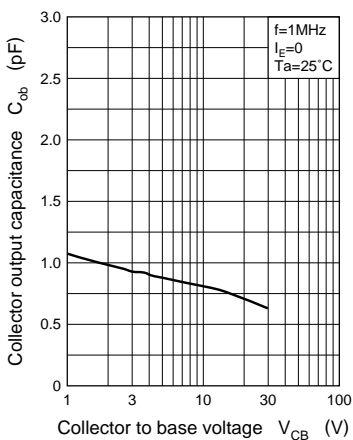
$V_{CE(sat)} - I_C$



$h_{FE} - I_C$



$C_{ob} - V_{CB}$



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