2SC4627J

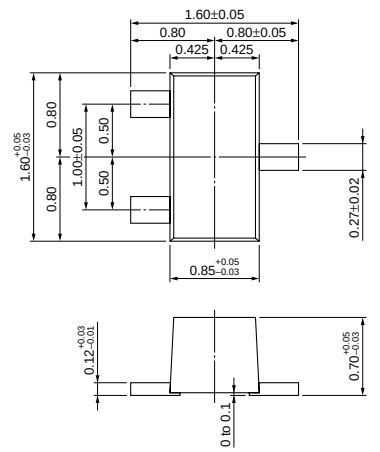
Silicon NPN epitaxial planer type

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)

Unit: mm



1:Base
2:Emitter EIAJ:SC–81
3:Collector SS–Mini Flat Type Package (J type)

Marking symbol : U

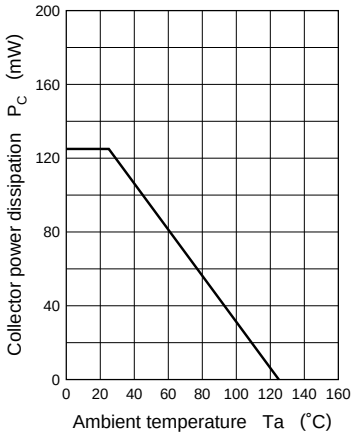
Absolute Maximum Ratings (Ta=25˚C)

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

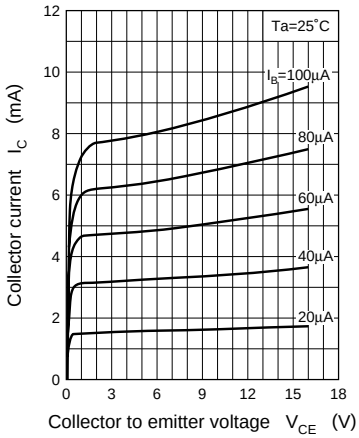
Electrical Characteristics (Ta=25˚C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	V_{CBO}	I_C = 10μA, I_E = 0	30			V
Emitter to base voltage	V_{EBO}	I_E = 10μA, 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

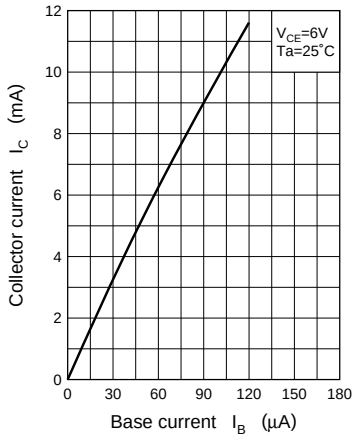
P_C — Ta



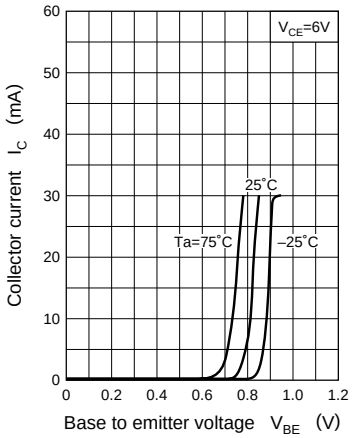
I_C — V_{CE}



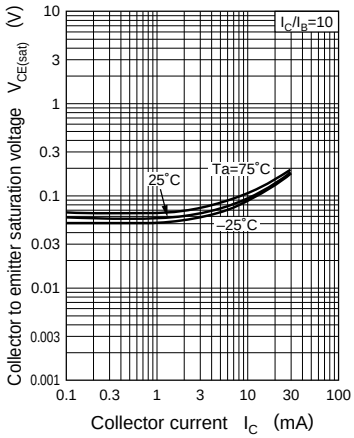
I_C — I_B



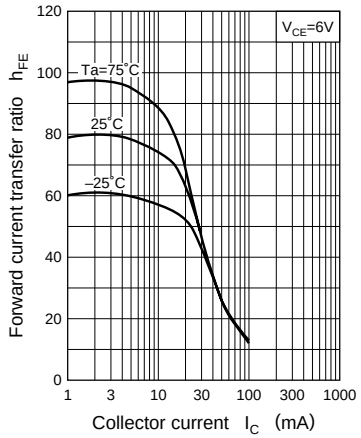
I_C — V_{BE}



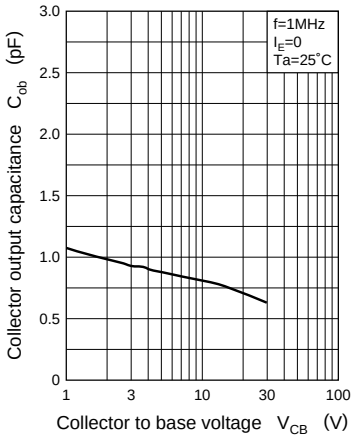
$V_{CE(sat)}$ — I_C



h_{FE} — I_C



C_{ob} — V_{CB}



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