2SC4626

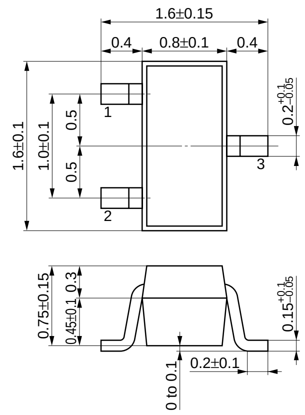
Silicon NPN epitaxial planer type

For high-frequency amplification
Complementary to 2SA1790

■ 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.

Unit: mm



1:Base
2:Emitter EIAJ:SC–75
3:Collector SS–Mini Type Package

Marking symbol : V

■ Absolute Maximum Ratings (Ta=25˚C)

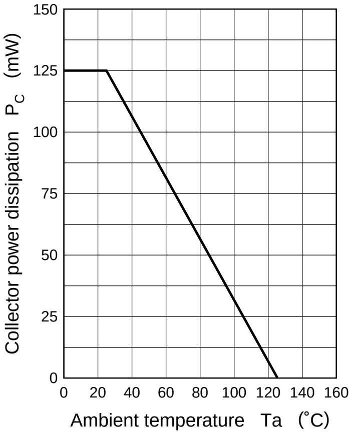
Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	30	V
Collector to emitter voltage	V_{CEO}	20	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_C	30	mA
Collector power dissipation	P_C	125	mW
Junction temperature	T_j	125	˚C
Storage temperature	T_{stg}	–55 ~ +125	˚C

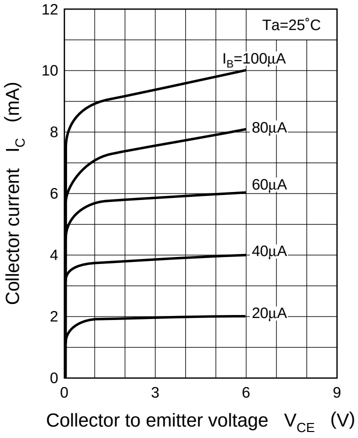
■ Electrical Characteristics (Ta=25˚C)

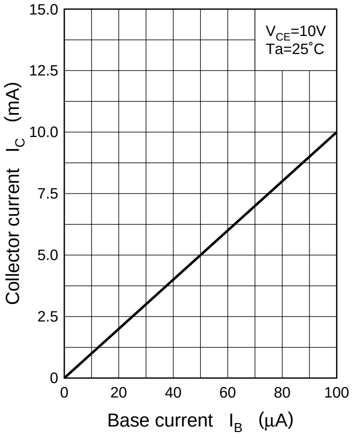
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 10V, I_E = 0			0.1	µA
Forward current transfer ratio	$h_{FE}{}^*$	V_{CB} = 10V, I_E = –1mA	70		220	
Transition frequency	f_T	V_{CB} = 10V, I_E = –1mA, f = 200MHz	150	250		MHz
Noise figure	NF	V_{CB} = 10V, I_E = –1mA, f = 5MHz		2.8	4	dB
Reverse transfer impedance	Z_{rb}	V_{CB} = 10V, I_E = –1mA, f = 2MHz		22	50	Ω
Common emitter reverse transfer capacitance	C_{re}	V_{CB} = 10V, I_E = –1mA, f = 10.7MHz		0.9	1.5	pF

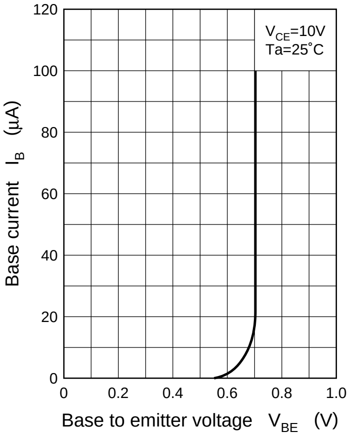
$^*h_{FE}$ Rank classification

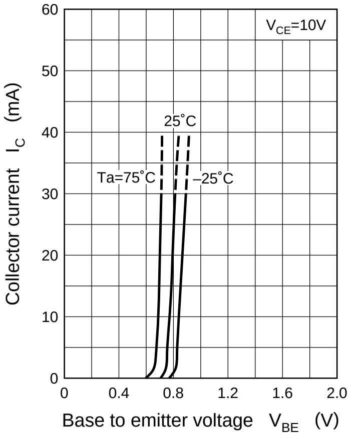
Rank	B	C
h_{FE}	70 ~ 140	110 ~ 220
Marking Symbol	VB	VC

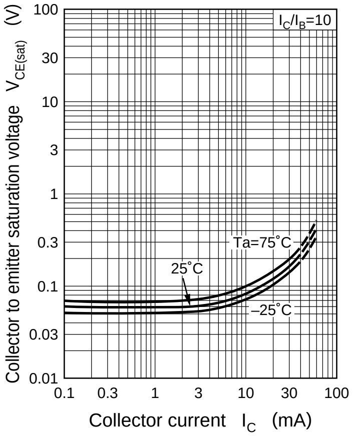

P_C — Ta

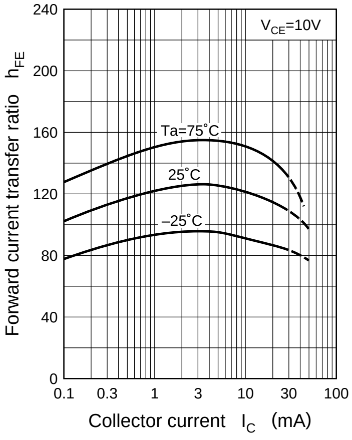

I_C — V_{CE}

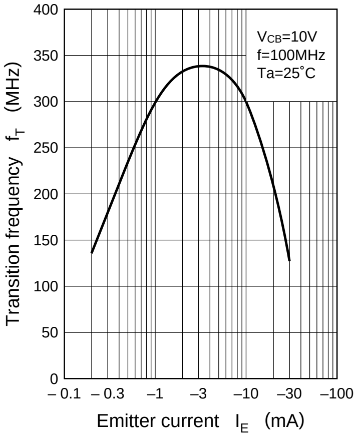

I_C — I_B

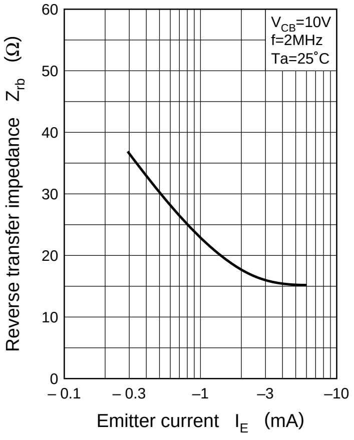

I_B — V_{BE}


I_C — V_{BE}

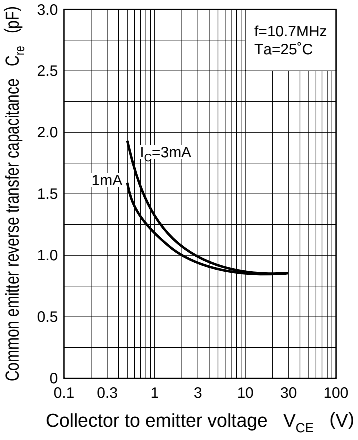

$V_{CE(sat)}$ — I_C


h_{FE} — I_C

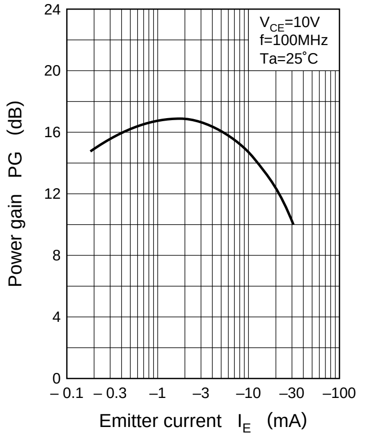

f_T — I_E


Z_{rb} — I_E

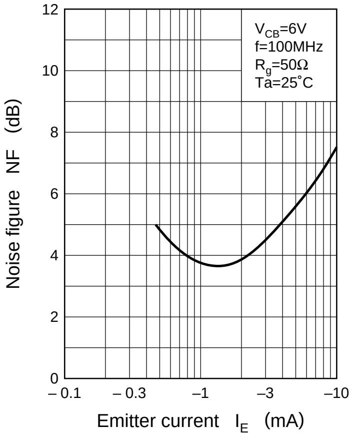
C_{re} — V_{CE}



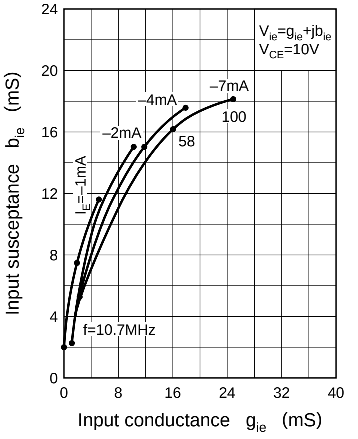
PG — I_E



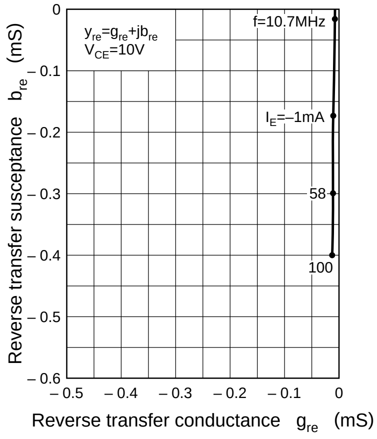
NF — I_E



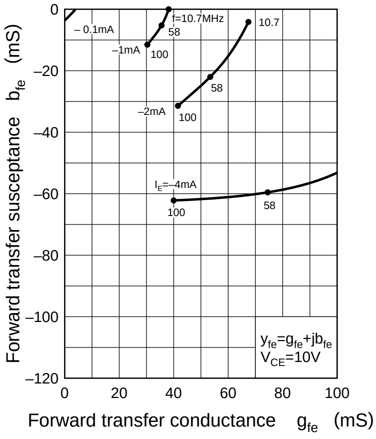
b_{ie} — g_{ie}



b_{re} — g_{re}



b_{fe} — g_{fe}



b_{oe} — g_{oe}