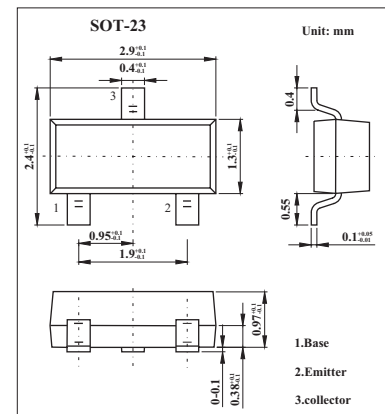


NPN Silicon Epitaxial Transistor

2SC3585

■ Features

- NF 1.8 dB TYP. @f = 2.0 GHz
- Ga 9 dB TYP. @f = 2.0 GHz



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector to base voltage	V _{CB0}	20	V
Collector to emitter voltage	V _{CEO}	10	V
Emitter to base voltage	V _{EB0}	1.5	V
Collector current	I _C	35	mA
Total power dissipation	P _T	200	mW
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-65 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I _{CBO}	V _{CB} = 10 V, I _E = 0			1.0	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 1V, I _C = 0			1.0	μA
DC current gain	h _{FE} *1	V _{CE} = 6 V, I _C = 10 mA	50	100	250	
Gain Bandwidth Product	f _T	V _{CE} = 6 V, I _C = 10 mA		10		GHz
Feed-Back Capacitance	C _{re} *2	V _{CB} = 10 V, I _E = 0, f = 1.0 MHz		0.3	0.8	pF
Insertion Power Gain	S _{21e} ²	V _{CE} = 6 V, I _C = 10 mA, f = 2.0 GHz	6.0	8.0		dB
Maximum Available Gain	MAG	V _{CE} = 6 V, I _C = 10 mA, f = 2.0 GHz		10		dB
Noise Figure	NF	V _{CE} = 6 V, I _C = 5 mA, f = 2.0 GHz		1.8	3.0	dB

*1. Pulse Measurement PW ≤ 350 μs, Duty Cycle ≤ 2 %

*2. The emitter terminal and the case shall be connected to the guard terminal of the three-terminal capacitance bridge.

■ hFE Classification

Marking	R43	R44	R45
Rank	R43/Q	R44/R	R45/S
hFE	50~100	80~160	125~250