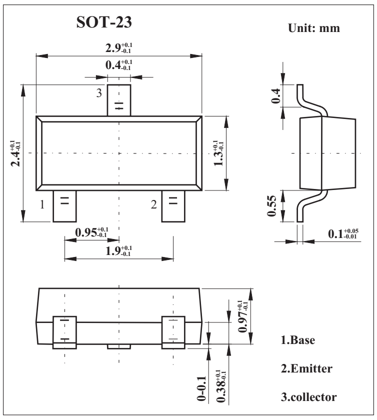
Silicon NPN Epitaxial Planar Type

2SC3429



■ Features

- ● Low Noise Figure
- ● NF=1.5dB,$|S_{21e}|^2$=16dB(f=500MHz)
- ● NF=1.5dB,$|S_{21e}|^2$=10.5dB(f=1GHz)

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	17	V
Collector-emitter voltage	V_{CEO}	12	V
Emitter-base voltage	V_{EBO}	3	V
Collector current	I_C	70	mA
Base current	I_B	30	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	125	℃
Storage temperature Range	T_{stg}	-55 to +125	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	V_{CB} = 10 V, I_E = 0			1	nA
Emitter cut-off current	I_{EBO}	V_{EB} = 1V, I_C = 0			1	nA
DC current gain	h_{FE}	V_{CE} = 10 V, I_C = 20mA	25			
Collecter Output Capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz		0.85		pF
Reverse Transfer Capacitance	C_{re}			0.57		pF
Transition Frequency	f_T	V_{CE}=10V.I_C=20mA		5		GHz
Insertion Gain	$|S_{21e}|^2$(1)	V_{CE}=10V.I_C=20mA,f=500MHz		16		dB
	$|S_{21e}|^2$(2)	V_{CE}=10V.I_C=20mA,f=1GHz		10.5		dB
Noise Figue	NF(1)	V_{CE}=10V.I_C=5mA,f=500MHz		1.5		dB
	NF(2)	V_{CE}=10V.I_C=5mA,f=1GHz		1.7		dB

■ Marking

Marking	ME