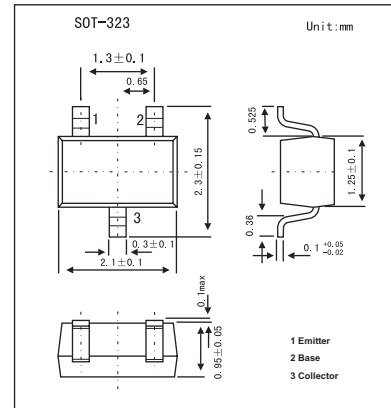


NPN Epitaxial Planar Silicon Transistor

2SC4399

■ Features

- High power gain : PG=25dB typ (f=100MHz).
- applied sets to be made small and slim.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	30	V
Collector-emitter voltage	V _{CEO}	20	V
Emitter-base voltage	V _{EB0}	5	V
Collector current	I _c	30	mA
Collector dissipation	P _c	150	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I _{cBO}	V _{CB} = 10V, I _E =0			0.1	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 4V, I _C =0			0.1	μA
DC current gain	h _{FE}	V _{CE} = 6V, I _c = 1mA	60		270	
Gain bandwidth product	f _T	V _{CE} = 6V, I _c = 1mA	200	320		MHz
Reverse transfer capacitance	C _{re}	V _{CB} = 6V, f = 1MHz		0.9	1.2	pF
Base-collector time constant	r _{bb'} C _c	V _{CB} = 6V, I _c = 1mA, f = 31.9MHz		12	20	ps
Power gain	PG	V _{CB} = 6V, I _c = 1mA, f = 100MHz		25		dB
Noise figure	NF	V _{CB} = 6V, I _c = 1mA, f = 100MHz		3.0		dB

■ hFE Classification

Marking	F		
Rank	3	4	5
hFE	60~120	90~180	135~270