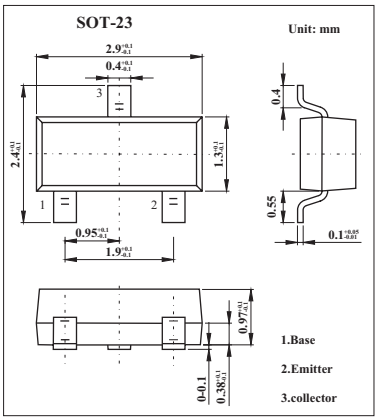
NPN Silicon Transistor

2SC5342SF



Features

- Large collector current: I_C=500mA.
- Low collector saturation voltage enabling low-voltage operation.

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	40	V
Collector-emitter voltage	V_{CEO}	32	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	500	mA
Collector dissipation	P_C	200	mW
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV_{CBO}	I_C=100μA , I_E=0	40			V
Collector-emitter breakdown voltage	BV_{CEO}	I_C=1mA , I_B=0	32			V
Emitter-base breakdown voltage	BV_{EBO}	I_E=10μA, I_C=0	5			V
Collector cutoff current	I_{CBO}	V_{CB}=40V, I_E=0			0.1	μA
Emitter cutoff current	I_{EBO}	V_{EB}=5V, I_C=0			0.1	μA
DC current transfer ratio	h_{FE}	V_{CE}=1V, I_C=-100mA	70		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C/I_B=100mA/10mA			0.25	V
Transition frequency	f_T	V_{CE}=6V, I_E=-20mA,		300		MHz
Output capacitance	C_{ob}	V_{CB}=6V, I_E=0, f=1MHz		7.5		pF

h_{FE} Classification

Marking	BA	
Rank	O	Y
hFE	70～140	120～240