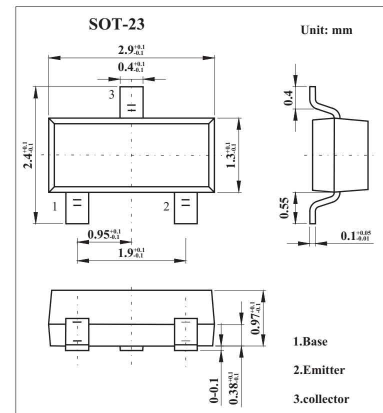
NPN Silicon Epitaxial Transistor

2SC3360



Features

- High DC current gain.hFE=90 to 450
- High voltage V_{CEO}=200V

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	200	V
Collector-emitter voltage	V_{CEO}	200	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Total power dissipation	P_T	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 cutoff current	I_{CBO}	V_{CB} = 200V, I_E=0			100	nA
Emitter cutoff current	I_{EBO}	V_{EB} = 5V, I_C=0			100	nA
DC current gain *	h_{FE}	V_{CE} =10V , I_C = 10mA	90	200	450	
		V_{CE} =10V , I_C = 50mA	50	200		
Base-emitter voltage *	V_{BE}	V_{CE} =10V , I_C = 10mA	0.6	0.64	0.7	V
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C = 50mA , I_B = 5mA		0.1	0.3	V
Base saturation voltage *	$V_{BE(sat)}$	I_C = 50mA , I_B = 5mA		0.8	1.2	V
Gain bandwidth product	f_T	V_{CE} = 10V , I_E = -10mA		160		MHz
Output capacitance	C_{ob}	V_{CB} = 30V , I_E = 0 , f = 1.0MHz		2.8		pF
Turn-on time	t_{on}	I_C = 10mA, I_{B1} = -I_{B2} = 1mA,		0.15		μs
Storage time	t_{stg}	V_{CC} = 10 V		1.3		μs
Fall time	t_f	$V_{BE(off)}$ = -2.5V		0.3		μs

* Pulse test: tp ≤ 350 μs; d ≤ 0.02.

h_{FE} Classification

Marking	N15	N16	N17
hFE	90～180	135～270	200～450