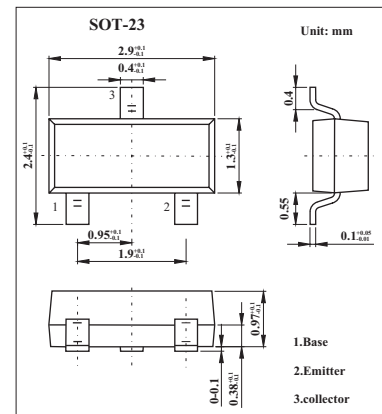


NPN Epitaxial Planar Silicon Transistors

2SC3361

■ Features

- Fast switching speed.
- High breakdown voltage.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	60	V
Collector-emitter voltage	V_{CE0}	50	V
Emitter-base voltage	V_{EB0}	5	V
Collector current	I_C	150	mA
Collector current (pulse)	I_{CP}	400	mA
Base current	I_B	40	mA
Collector dissipation	P_C	150	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

2SC3361

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	ICBO	V _{CB} = 40V , I _E = 0			0.1	μA
Emitter cutoff current	IEBO	V _{EB} = 4V , I _C = 0			0.1	μA
DC current Gain	hFE	V _{CE} = 6V , I _C = 1mA	90		400	
Gain bandwidth product	f _T	V _{CE} = 6V , I _C = 1mA		100		MHz
Common base output capacitance	C _{ob}	V _{CB} = 6V , f = 1MHz		2.7		pF
Collector-to-emitter saturation voltage	V _{CE(sat)}	I _C = 10mA , I _B = 1mA		0.1	0.4	V
Base-to-emitter saturation voltage	V _{BE(sat)}	I _C = 10mA , I _B = 1mA		0.75	1.1	V
Collector-to-base breakdown voltage	V _{(BR)CBO}	I _C = 10μA , I _E = 0	60			V
Collector-to-emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA , R _{BE} = ∞	50			V
Emitter-to-base breakdown voltage	V _{(BR)EBO}	I _E = 10μA , I _C = 0	5			V
Delay time	t _d		40		ns	
Rise time	t _r		80		ns	
Storage time	t _{stg}		230		ns	
Fall time	t _f		160		ns	

■ hFE Classification

Marking	S4	S5	S6
hFE	90~180	135~270	200~400