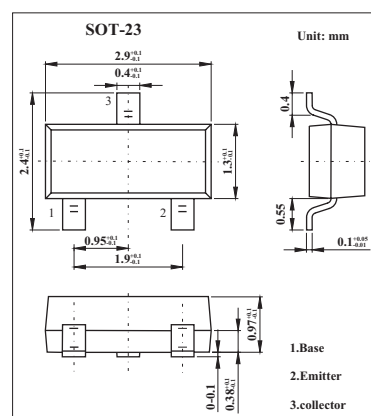


NPN Epitaxial Planar Silicon Transistor

2SC3661

■ Features

- Low frequency general-purpose amplifiers, drivers, muting circuit.
- Adoption of FBET process.
- High DC current gain ($h_{FE}=800$ to 3200).
- Low collector-to-emitter saturation voltage ($V_{CE(sat)} \leq 0.5V$).
- High V_{EBO} ($V_{EBO} \geq 15V$).

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	30	V
Collector-emitter voltage	V_{CEO}	25	V
Emitter-base voltage	V_{EBO}	15	V
Collector current	I_C	300	mA
Collector current (pulse)	I_{cp}	500	mA
Collector dissipation	P_C	200	mW
Junction temperature	T_j	125	$^\circ C$
Storage temperature	T_{stg}	-55 to +125	$^\circ C$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 20V, I_E = 0$			0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 10V, I_C = 0$			0.1	μA
DC current gain	h_{FE}	$V_{CE} = 5V, I_C = 10mA$	800	1500	3200	
Gain bandwidth product	f_T	$V_{CE} = 10V, I_C = 10mA$		250		MHz
Output capacitance	C_{ob}	$V_{CB} = 10V, f = 1.0MHz$		2.7		pF
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 200mA, I_B = 4mA$		0.12	0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 200mA, I_B = 4mA$		0.85	1.2	V
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, I_B = 0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	15			V

■ Marking

Marking	FY
---------	----