

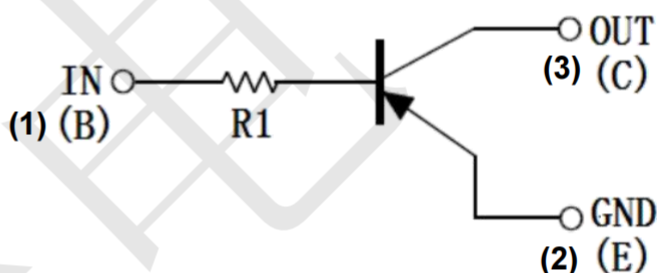
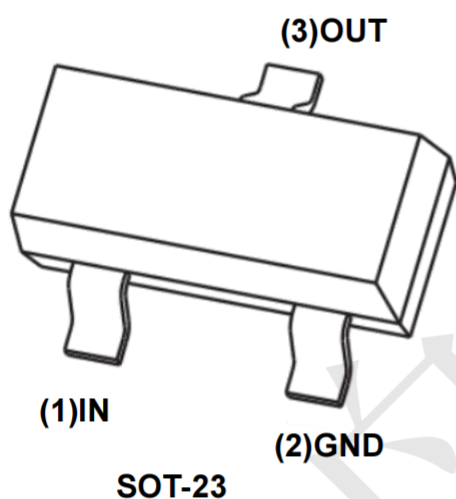
Product Summary

- $V_{CBO} = -50V$
- $V_{CEO} = -50V$
- $I_C = -100mA$
- $R_1 = 10k\Omega$

Features

- Built-in bias resistors
- making device design easy
- almost completely eliminating parasitic effects

Circuit diagram and pin information



Absolute Maximum Ratings

($T_a = 25^\circ C$ unless otherwise specified)

PARAMETER	SYMBOL	LIMIT	UNIT
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5V	V
Collector current	I_C	-100	mA
Power Total Dissipation @ $T_A = 25^\circ C$	P_D	200	mW
Maximum Operating Junction Temperature	T_J	+150	$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ C$

Electrical Characteristics

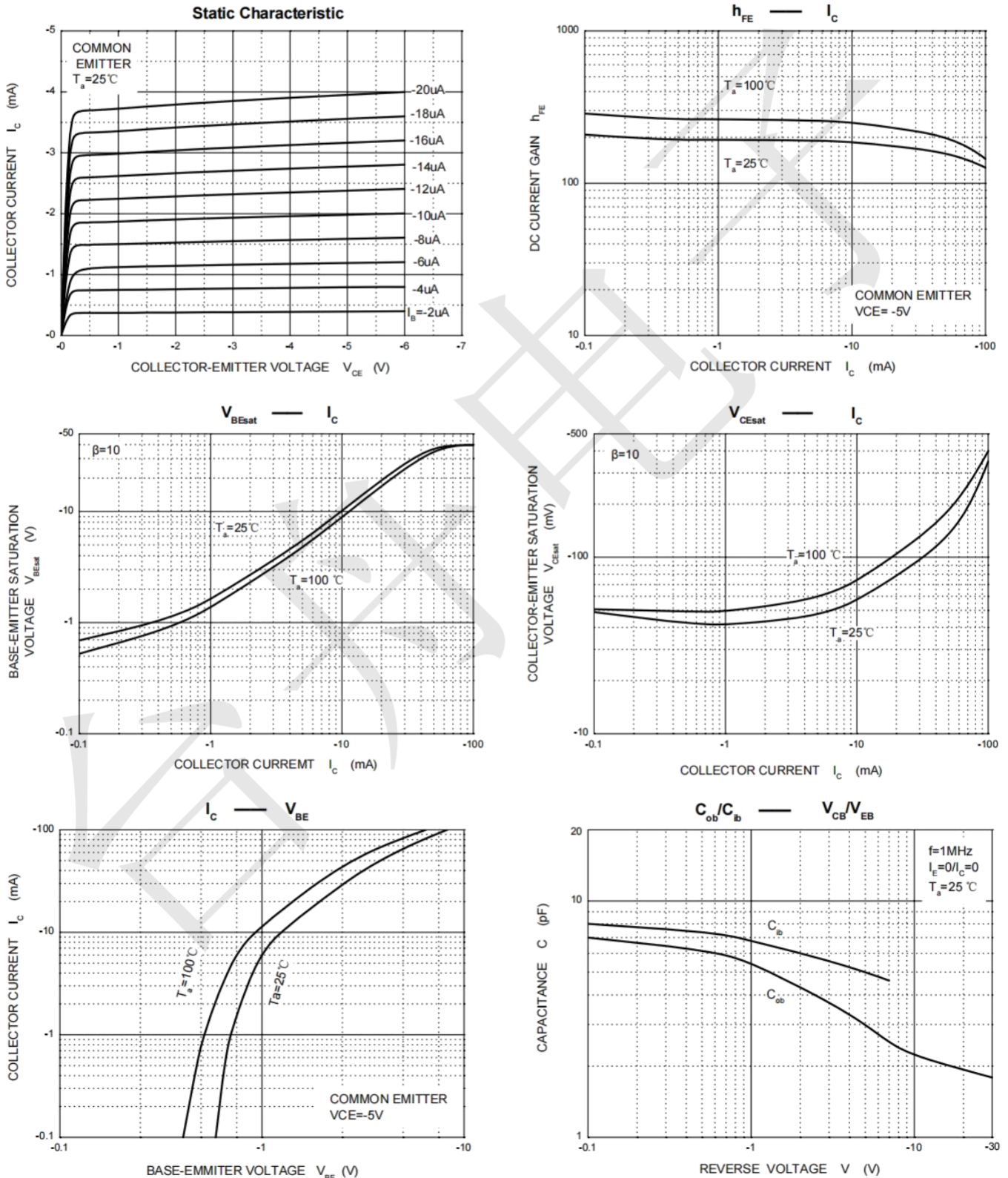
(TA=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -50\mu A, I_E = 0$	-50	--	--	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-50	--	--	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -50\mu A, I_C = 0$	-5	--	--	V
Collector cut-off current	I_{CBO}	$V_{CB} = -50V, I_E = 0$	--	--	-0.5	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4V, I_C = 0$	--	--	-0.5	μA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -5mA, I_B = -0.5mA$	--	--	-0.3	V
DC current gain	h_{FE}	$V_{CE} = -5V, I_C = -1mA$	100	250	600	--
Input resistor	R_1		7	10	13	k Ω
Transition frequency	f_T	$V_{CE} = -10V, I_E = -5mA,$ $f = 100MHz$	--	250	--	MHz

Note:

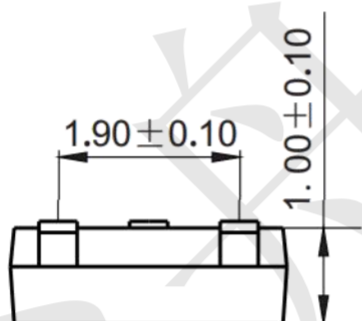
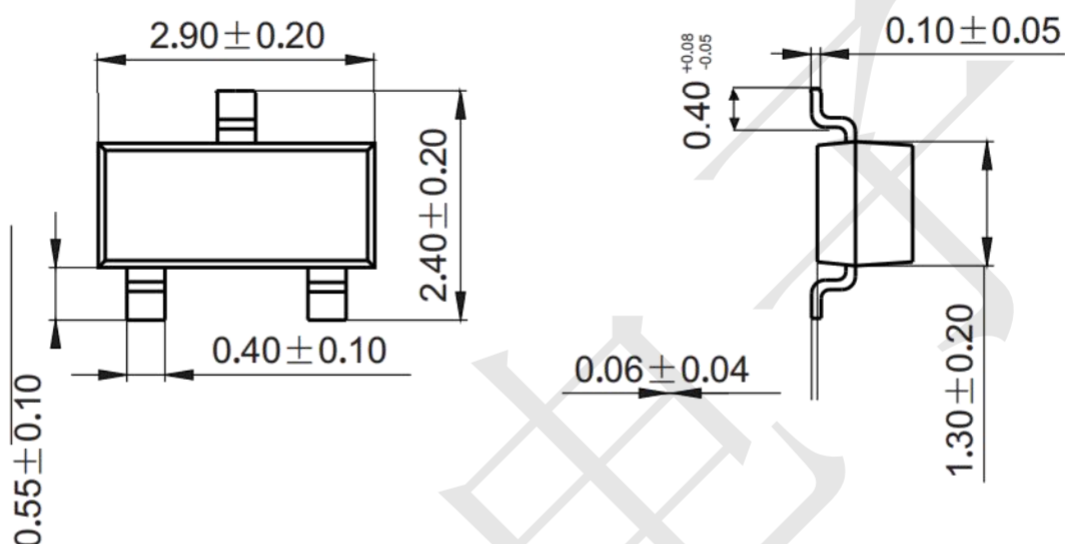
- 1.Characteristics of built-in transistor
- 2.Each terminal mounted on a reference land

Typical Performance Characteristics(TA=25°C)



Package Outline Dimensions (unit: mm)

SOT-23



Mounting Pad Layout (unit: mm)

