

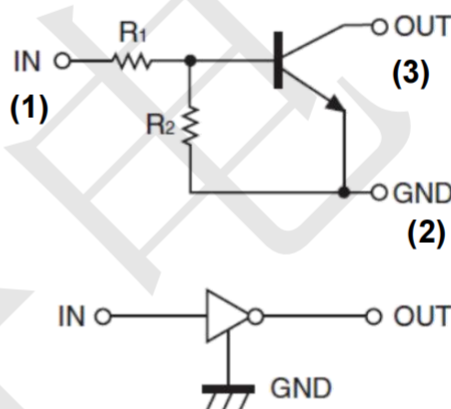
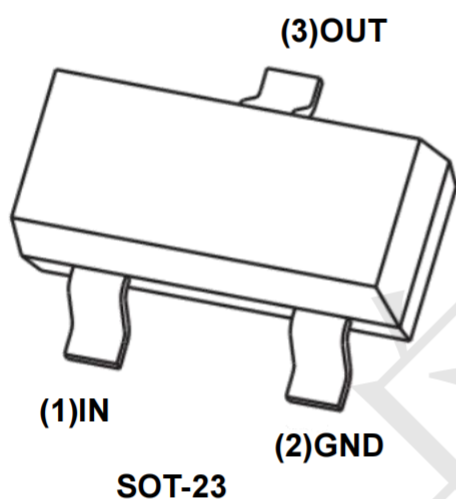
Product Summary

- $V_{CC} = 50V$
- $I_C = 100mA$
- $R_1 = 10k\Omega$
- $R_2 = 10k\Omega$

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
Supply Voltage	V_{CC}	50	V
Input Voltage	V_{IN}	-5~40V	V
Output Current	I_O	100	mA
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

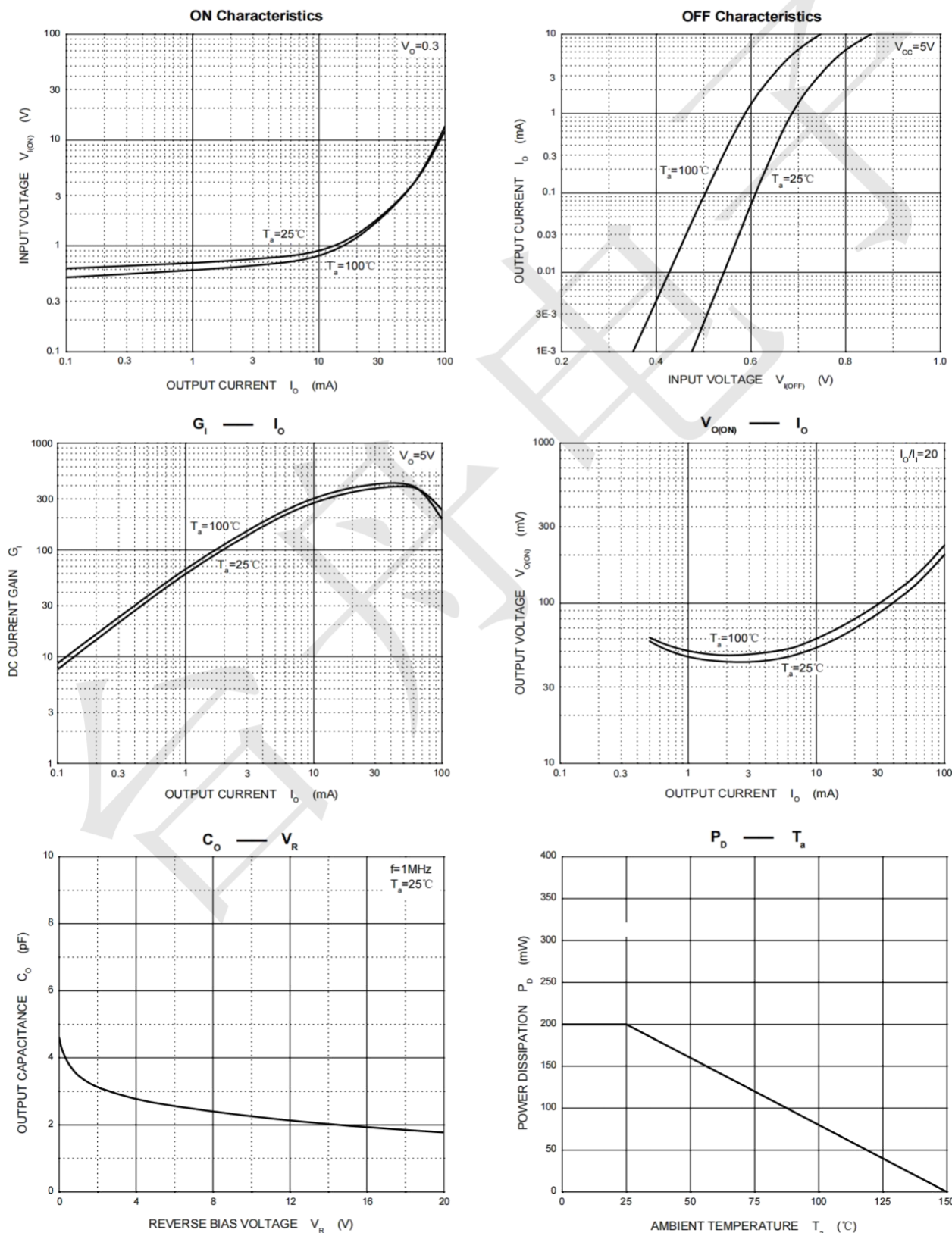
(TA=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Input voltage	$V_{I(off)}$	$V_{CC}=5V, I_O=100\mu A$	0.5	--	--	V
	$V_{I(on)}$	$V_O=0.3V, I_O=10mA$	--	--	3	V
Output voltage	$V_{O(on)}$	$I_O/I_I=10mA/0.5mA$	--	0.1	0.3	V
Input current	I_I	$V_I=5V$	--	--	0.88	mA
Output current	$I_{O(off)}$	$V_{CC}=50V, V_I=0$	--	--	0.5	μA
DC current gain	G_I	$V_O=5V, I_O=10mA$	30	--	--	--
Input resistance	R_1		7	10	13	k Ω
Resistance ratio	R_2/R_1		0.8	1.0	1.2	--
Transition frequency	f_T	$V_O=10V, I_O=5mA, f=100MHz$	--	250	--	MHz

Note:

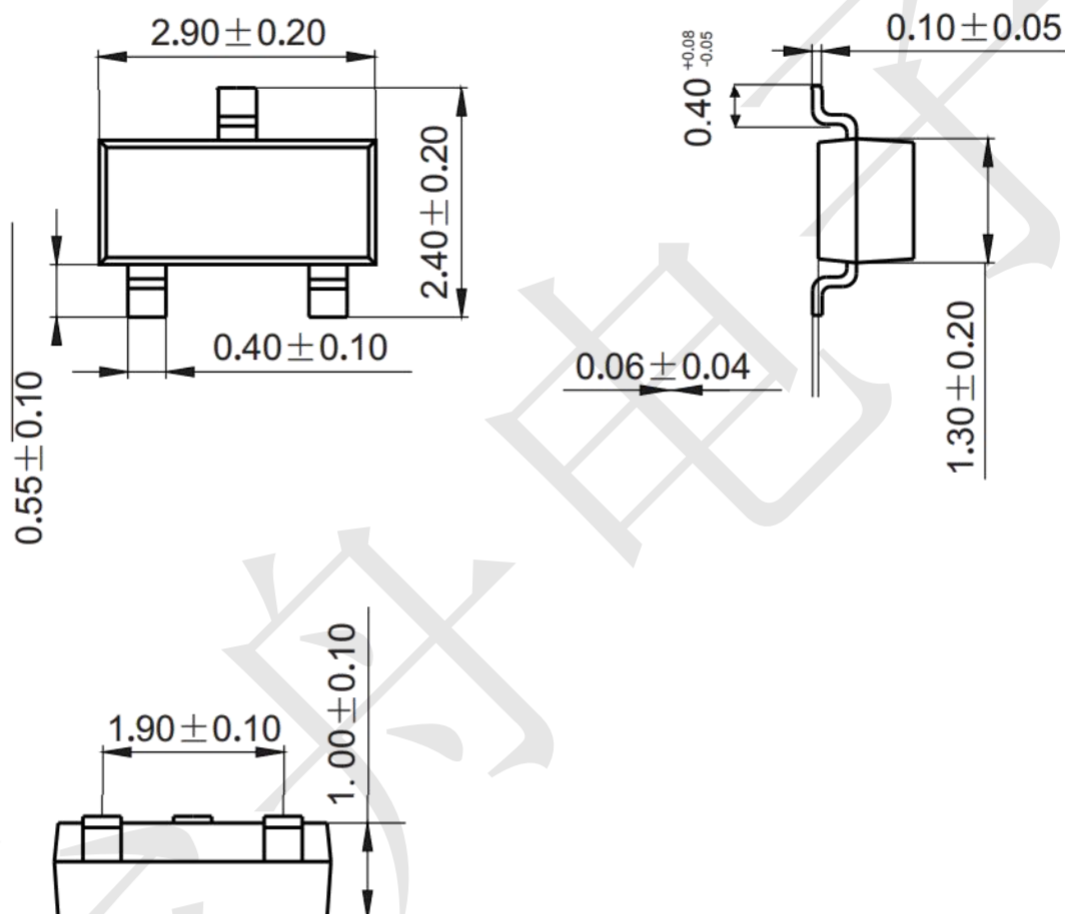
- 1.Characteristics of built-in transistor
- 2.Each terminal mounted on a reference land

Typical Performance Characteristics(TA=25°C)



Package Outline Dimensions (unit: mm)

SOT-23



Mounting Pad Layout (unit: mm)

