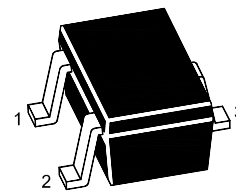


Features

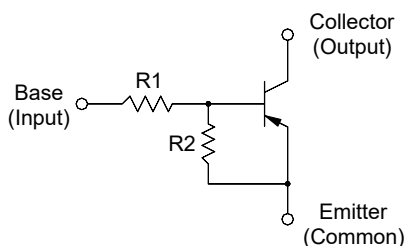
- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

SOT-323



1.Base 2.Emitter 3.Collector

Equivalent Circuit



Resistor Values/Marking Code

Type	R1 (KΩ)	R2 (KΩ)	Marking Code
DTA114YSI	10	47	54

Absolute Maximum Ratings (T_A=25°C)

Parameter	Symbol	Value	Unit
Output Voltage	-V _O	50	V
Input Voltage	-V _I	40,-6	V
Output Current	-I _O	70	mA
Peak Collector Current	-I _{CM}	100	mA
Maximum Power Dissipation	P _D	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

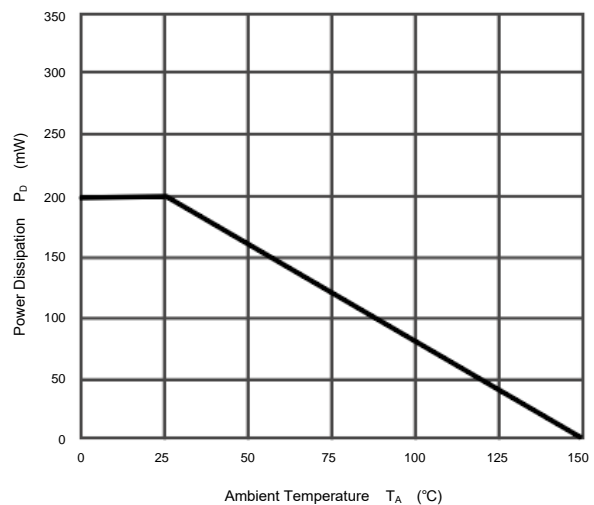
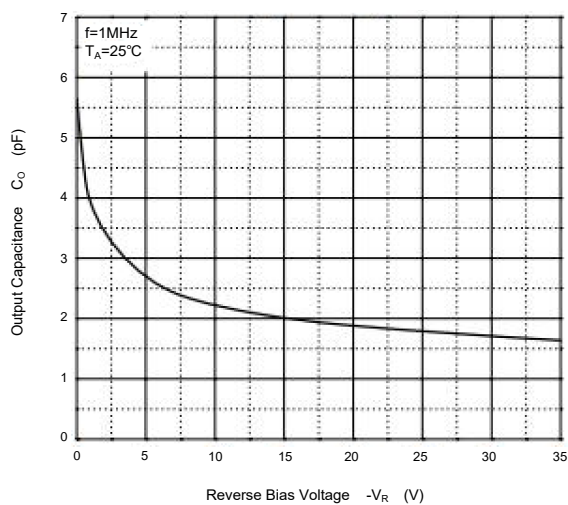
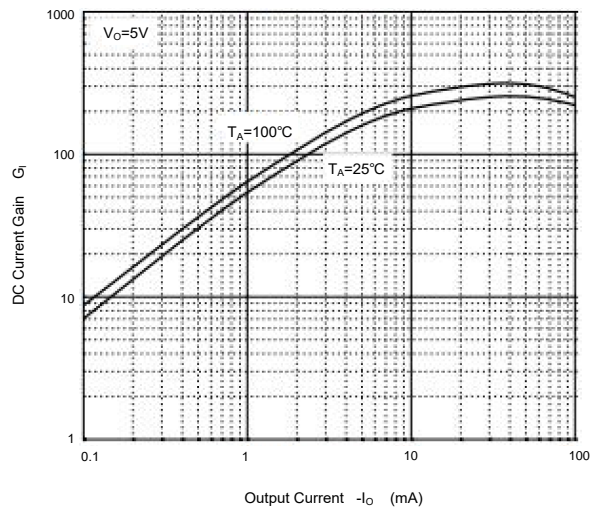
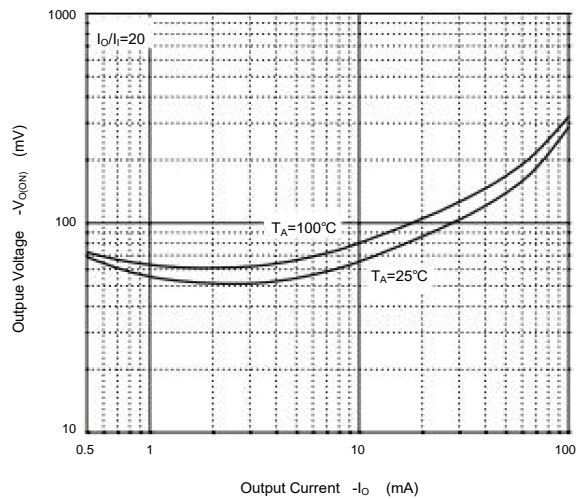
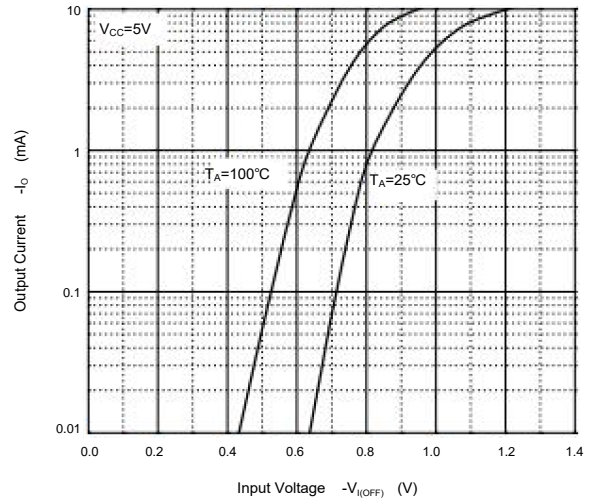
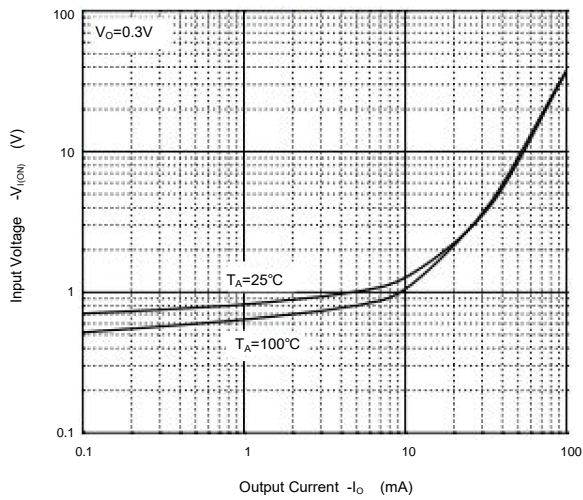


Electrical Characteristics (T_A=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at V _O = -5 V, I _O = -5 mA	G _I	68	--	--	--
Output Cutoff Current at V _O = -50 V	-I _{O(OFF)}	--	--	500	nA
Input Current at V _I = -5 V	-I _I	--	--	0.88	mA
Output Voltage (ON) at I _O = -5 mA, I _I = -0.25 mA	-V _{O(ON)}	--	--	0.3	V
Input Voltage (ON) at V _O = -0.3 V, I _O = -1 mA	-V _{I(ON)}	--	--	1.4	V
Input Voltage (OFF) at V _O = -5 V, I _O = -0.1 mA	-V _{I(OFF)}	0.3	--	--	V
Transition Frequency at V _O = -10 V, I _O = -5 mA, f=100MHz	f _T	--	250	--	MHz



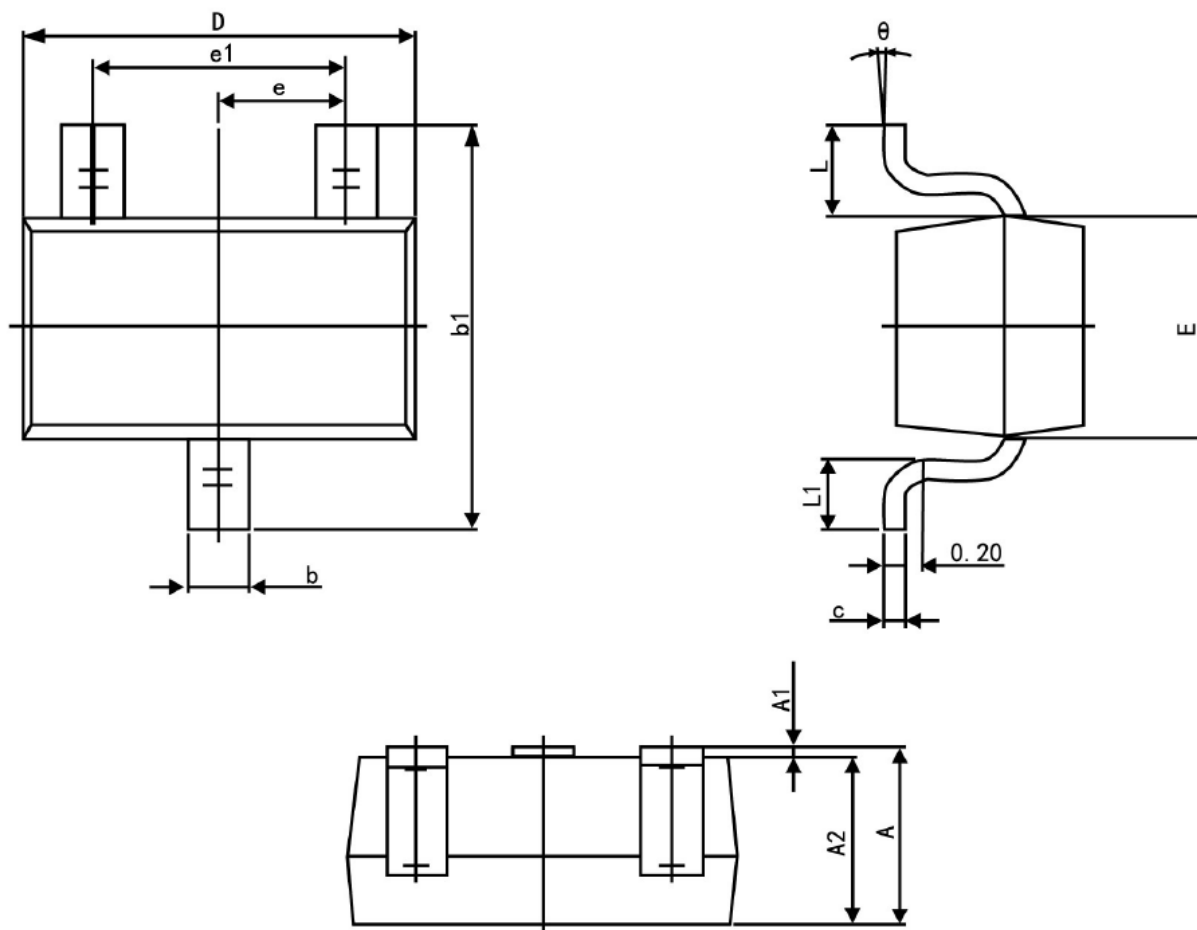
Typical Characteristic Curves



Package Outline

SOT-323

Dimensions in mm



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.10
A1	0.00	0.10
A2	0.90	1.00
b	0.20	0.40
c	0.08	0.15
D	2.00	2.20
E	1.15	1.35
E1	2.15	2.45
e	0.65 TYP.	
e1	1.20	1.40
L	0.525 REF.	
L1	0.26	0.46
θ	0°	8°