



GP
ELECTRONICS

DTA143EE

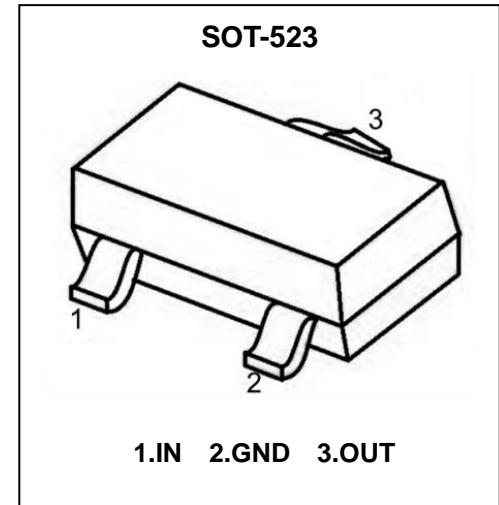
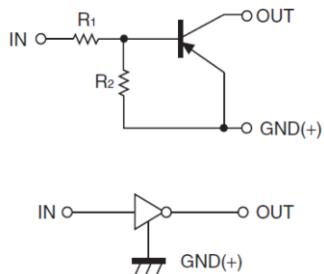
Digital Transistor

DTA143EE Digital Transistor(NPN)

Feature

- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors
- The bias resistors consist of thin-film resistors with complete isolation to allow positive biasing of the input. They also have the advantage of almost completely eliminating parasitic effects
- Only the on/off conditions need to be set for operation, making device design easy

Schematic diagram



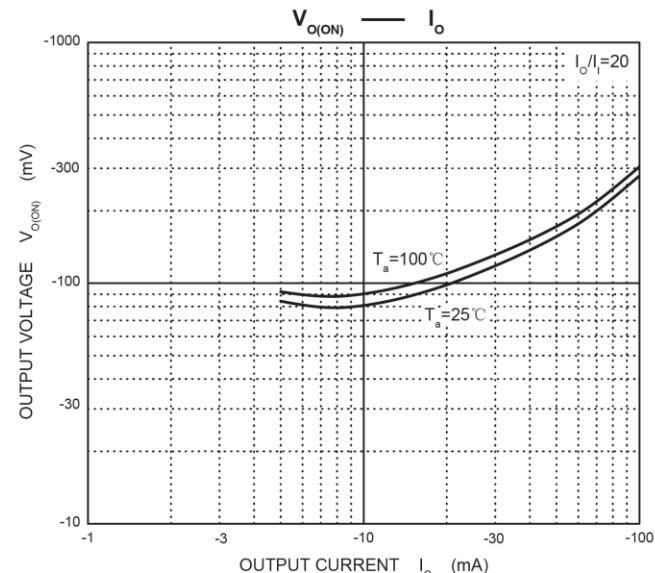
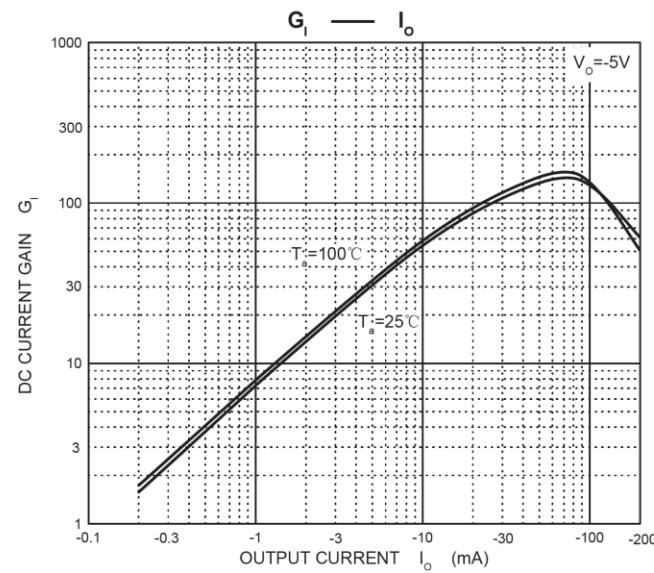
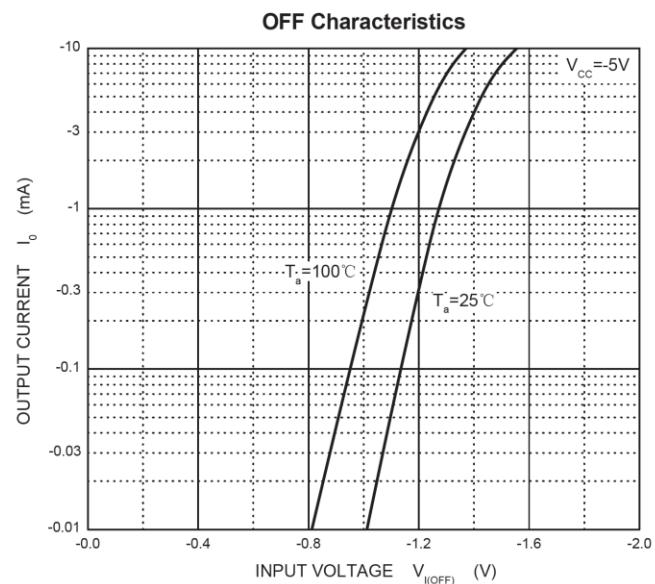
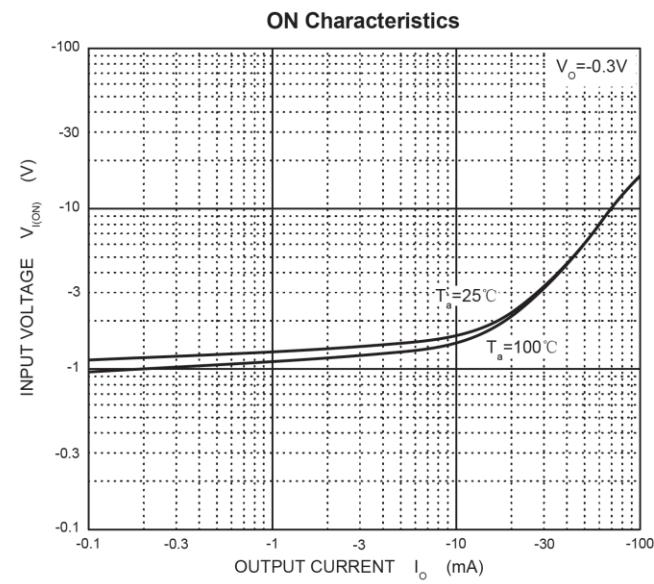
ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

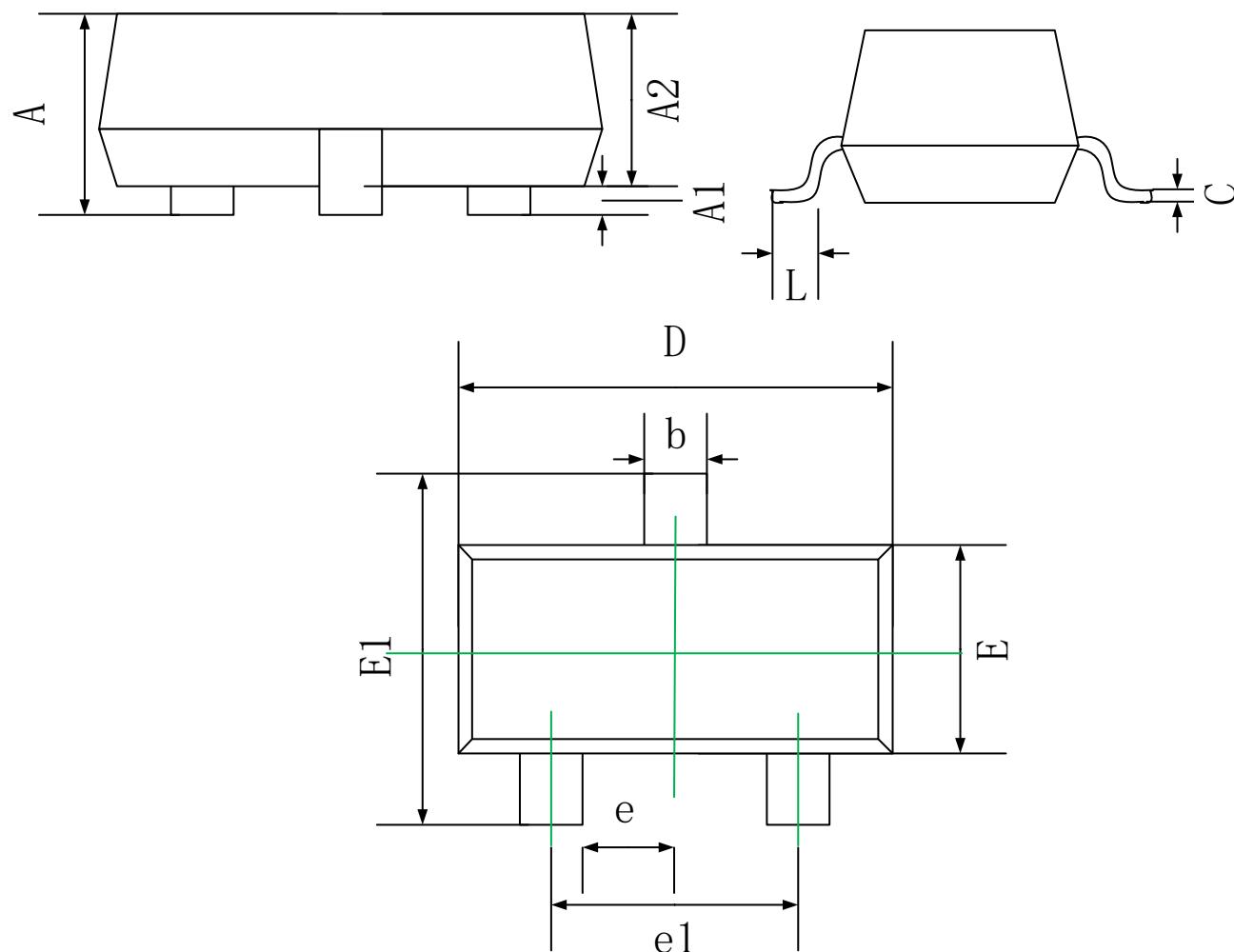
Parameter	Symbol	Value	Unit
Supply Voltage	V_{cc}	-50	V
Input Voltage	V_{in}	-30~+10	V
Output Current	I_o	-100	mA
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-45 ~ +125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Input voltage	$V_{I(off)}$	$V_{cc}=-5\text{V}$, $I_o=-100\mu\text{A}$	-0.5			V
	$V_{I(on)}$	$V_o=0.3\text{V}$, $I_o=-20\text{mA}$			-3	V
Output voltage	$V_{O(on)}$	$I_o=-10\text{mA}$, $I_i=-0.5\text{mA}$			-0.3	V
Output current	$I_{O(off)}$	$V_{cc}=-50\text{V}$, $V_i=0\text{V}$			-0.5	μA
DC current gain	G_I	$V_o=-5\text{V}$, $I_o=10\text{mA}$	20			
Input resistance	R_1		3.29	4.7	6.11	$\text{k}\Omega$
Resistance ratio	R_2/R_1		0.8	1	1.2	
Transition frequency	f_T	$V_o=-10\text{V}$, $I_o=-5\text{mA}$, $f=1\text{MHz}$		250		MHz

Typical Characteristics



SOT-523 Package Information


Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.70	0.90
A1	0.00	0.10
A2	0.70	0.80
b	0.25	0.35
c	0.10	0.20
D	1.50	1.70
E	0.70	0.90
E1	1.45	1.75
e	0.50 TYP.	
e1	0.90	1.10
L	0.40 REF.	
L1	0.26	0.46

单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)