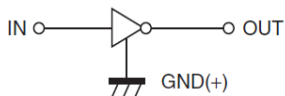
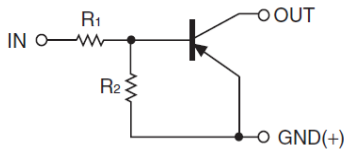


Digital Transistors

DTA113ZE (KDTA113ZE)

Features

- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors(see equivalent circuit)
- 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



Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

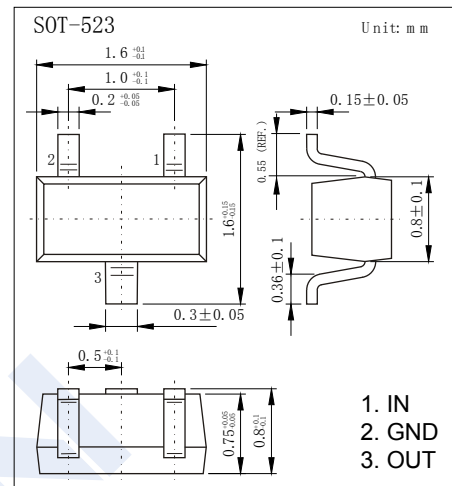
Parameter	Symbol	Rating	Unit
Supply Voltage	V_{CC}	-50	V
Input Voltage	V_{IN}	-10~+5	
Output Current	I_o	-100	mA
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input voltage	$V_{I(off)}$	$V_{CC} = -5\text{ V}, I_o = -100\ \mu\text{A}$	-0.3			V
	$V_{I(on)}$	$V_o = -0.3\ \text{V}, I_o = -20\ \text{mA}$			-3	
Output voltage	$V_{O(on)}$	$I_o = -10\ \text{mA}, I_i = -0.5\ \text{mA}$			-0.3	
Input current	I_i	$V_i = -5\ \text{V}$			-7.2	mA
Output current	$I_{o(off)}$	$V_{CC} = -5\ \text{V}, V_i = 0$			-0.5	μA
DC current gain	G_i	$V_o = -5\ \text{V}, I_o = -5\ \text{mA}$	33			
Input resistance	R_1		0.7	1	1.3	K Ω
Resistance ratio	R_2/R_1		8	10	12	
Transition frequency	f_T	$V_o = -10\ \text{V}, I_o = -5\ \text{mA}, f = 100\ \text{MHz}$		250		MHz

Marking

Marking	E11
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Digital Transistors

DTA113ZE (KDTA113ZE)

■ Typical Characteristics

