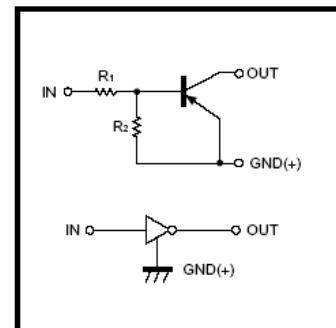


## Digital transistors (PNP)

### FEATURES

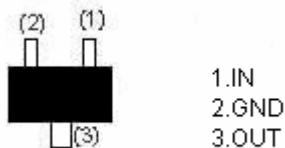
1. Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors (see equivalent circuit).
2. The bias resistors consist of thin-film resistors with complete isolation to allow positive biasing of the input. They also have the advantage of almost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

### ● Equivalent circuit



### PIN CONNECTIONS AND MARKING

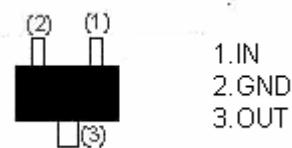
**DTA114EE**



SOT-523

Addreviated symbol: 14

**DTA114EUA**



SOT-323

Addreviated symbol: 14

**DTA114EKA**



SOT-23-3L

Addreviated symbol: 14

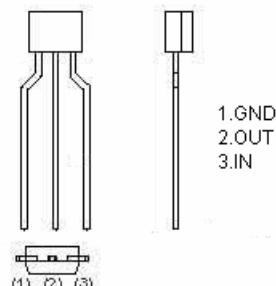
**DTA114ECA**



SOT-23

Addreviated symbol: 14

**DTA114ESA**



**Absolute maximum ratings(Ta=25°C)**

Parameter	Symbol	Limits (DTA114E□)					Unit
		E	UA	CA	KA	SA	
Supply voltage	V <sub>CC</sub>				-50		V
Input voltage	V <sub>IN</sub>				-40~10		V
Output current	I <sub>O</sub>				-50		mA
	I <sub>C(MAX)</sub>				-100		
Power dissipation	P <sub>d</sub>	150		200		300	mW
Junction temperature	T <sub>j</sub>				150		°C
Storage temperature	T <sub>stg</sub>				-55~150		°C

**Electrical characteristics (Ta=25°C)**

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Input voltage	V <sub>I(off)</sub>			-0.5	V	V <sub>CC</sub> =-5V , I <sub>O</sub> =-100μA
	V <sub>I(on)</sub>	-3				V <sub>O</sub> =-0.3V , I <sub>O</sub> =-10 mA
Output voltage	V <sub>O(on)</sub>			-0.3	V	I <sub>O</sub> /I <sub>I</sub> =-10mA/-0.5mA
Input current	I <sub>I</sub>			-0.88	mA	V <sub>I</sub> =-5V
Output current	I <sub>O(off)</sub>			-0.5	μA	V <sub>CC</sub> =-50V, V <sub>I</sub> =0
DC current gain	G <sub>I</sub>	30				V <sub>O</sub> =-5V , I <sub>O</sub> =-5mA
Input resistance	R <sub>1</sub>	7	10	13	KΩ	
Resistance ratio	R <sub>2</sub> /R <sub>1</sub>	0.8	1	1.2		
Transition frequency	f <sub>T</sub>		250		MHz	V <sub>CE</sub> =-10V , I <sub>E</sub> =5mA,f=100MHz

## Typical Characteristics

**●Electrical characteristic curves**
