

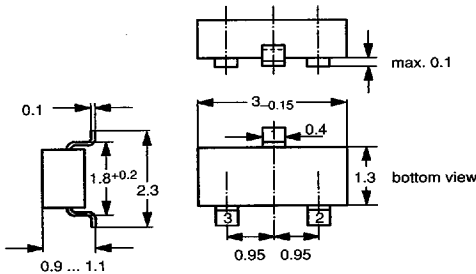
DTA143ZK

PNP Digital Transistor

with built-in bias resistor. This allows inverter circuit configuration without external resistors for input.

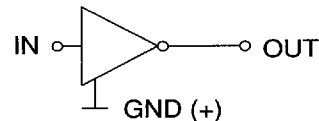
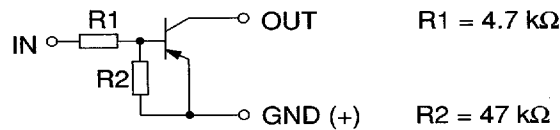
The pin configuration is the following:

- 1 = Collector/OUT
- 2 = Base/IN
- 3 = Emitter/GND



Plastic Package JEDEC TO-236
23 A 3 according to DIN 41869
The case is impervious to light.

Weight approximately 0.008 g
Dimensions in mm



Equivalent circuit

Absolute Maximum Ratings

	Symbol	Value	Unit
Supply Voltage	$-V_{SUP}$	50	V
Input Voltage	$-V_I$	30	V
	V_I	5	V
Collector Current	$-I_C$	100	mA
Peak Collector Current	$-I_{CM}$	100	mA
Power Dissipation	P_{tot}	200 ¹⁾	mW
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_S	-55 to +125	°C

¹⁾ Device on fiberglass substrate 30 mm x 10 mm, pad size 2 mm x 2 mm

Characteristics at $T_{amb} = 25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Input OFF Voltage at $-V_{SUP} = 5\text{ V}$, $-I_O = 100\text{ }\mu\text{A}$	$-V_{I(OFF)}$	0.5	—	—	V
Input ON Voltage at $-V_O = 0.3\text{ V}$, $-I_O = 5\text{ mA}$	$-V_{I(ON)}$	—	—	1.3	V
Output ON Voltage at $-I_O = 5\text{ mA}$, $-I_I = 0.25\text{ mA}$	$-V_{O(ON)}$	—	0.1	0.3	V
Input Current at $-V_I = 5\text{ V}$,	$-I_I$	—	—	1.8	mA
Output OFF Current at $-V_{SUP} = 30\text{ V}$, $V_I = 0\text{ V}$	$-I_{O(OFF)}$	—	—	10	μA
DC Current Gain at $-I_O = 10\text{ mA}$, $-V_O = 5\text{ V}$	G_I	80	—	—	—
Input Resistance	R_I	—	4.7	—	$\text{k}\Omega$
Resistance Ratio	R_2/R_1	8	10	12	—
Transition Frequency at $-V_{CE} = 10\text{ V}$, $I_E = 5\text{ mA}$	f_T	—	250	—	MHz