

# UTCDA143X

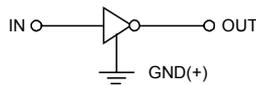
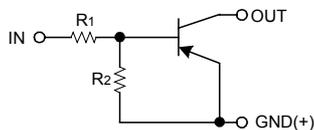
# PNP DIGITAL TRANSISTOR

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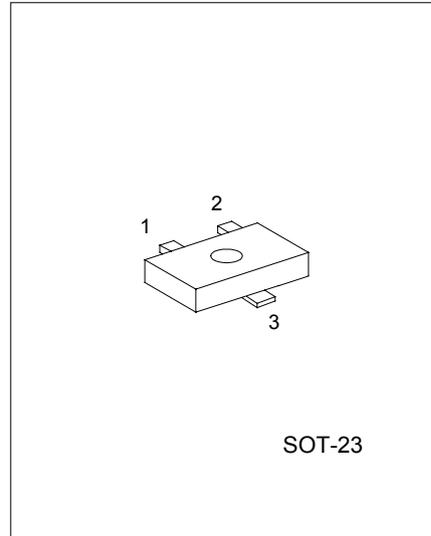
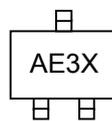
### FEATURES

- \* Built-in bias thin film resistors per equivalent circuit
- \* Easy on/off applications

### EQUIVALENT CIRCUIT



### MARKING



SOT-23

1: GND 2: IN 3: OUT

\*Pb-free plating product number:DTA143XL

### ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

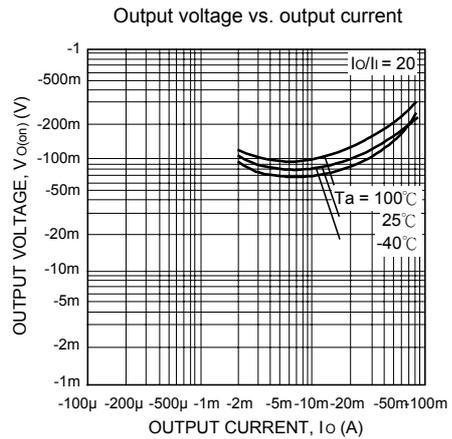
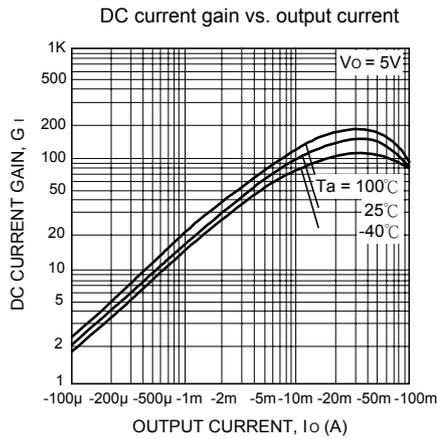
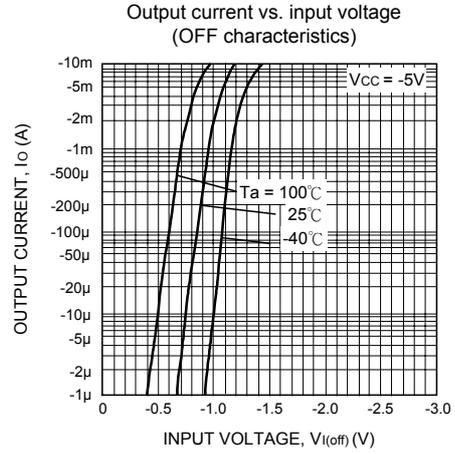
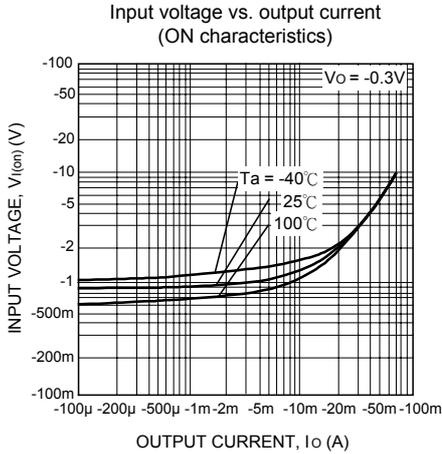
PARAMETER	SYMBOL	RATINGS	UNIT
Supply voltage	V <sub>CC</sub>	-50	V
Input voltage	V <sub>I</sub>	-20 ~ +7	V
Output current	I <sub>O</sub>	-100	mA
	I <sub>C (Max.)</sub>	-100	
Power dissipation	P <sub>D</sub>	200	mW
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 ~ +150	°C

### ELECTRICAL CHARACTERISTICS (Ta = 25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input voltage	V <sub>I (off)</sub>	V <sub>CC</sub> =-5V, I <sub>O</sub> =-100 μA			-0.3	V
	V <sub>I (on)</sub>	V <sub>O</sub> =-0.3V, I <sub>O</sub> =-20mA	-2.5			
Output voltage	V <sub>O (on)</sub>	I <sub>O</sub> /I <sub>I</sub> =-10mA/-0.5mA		-0.1	-0.3	V
Input current	I <sub>I</sub>	V <sub>I</sub> =-5V			-1.8	mA
Output current	I <sub>O (off)</sub>	V <sub>CC</sub> =-50V, V <sub>I</sub> =0V			-0.5	μA
DC current gain	G <sub>I</sub>	V <sub>O</sub> =-5V, I <sub>O</sub> =-10mA	30			
Input resistance	R <sub>1</sub>		3.29	4.7	6.11	KΩ
Resistance ratio	R <sub>2</sub> /R <sub>1</sub>		1.7	2.1	2.6	
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-10V, I <sub>E</sub> =5mA, f=100MHz *		250		MHz

\* Transition frequency of the device

ELECTRICAL CHARACTERISTIC CURVES



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