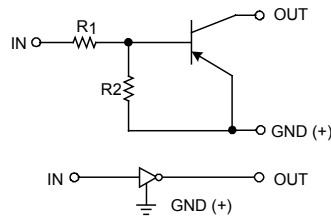


PNP DIGITAL TRANSISTOR
(BUILT-IN RESISTORS)

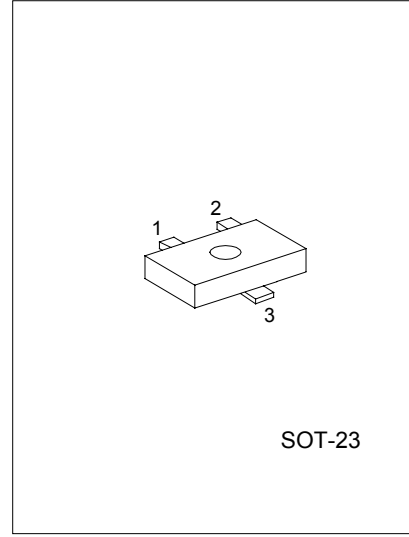
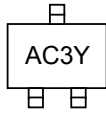
FEATURES

- *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.

EQUIVALENT CIRCUIT



MARKING



1: GND 2: IN 3: OUT

SOT-23

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ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

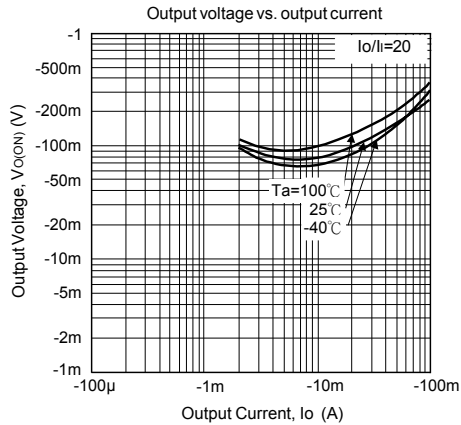
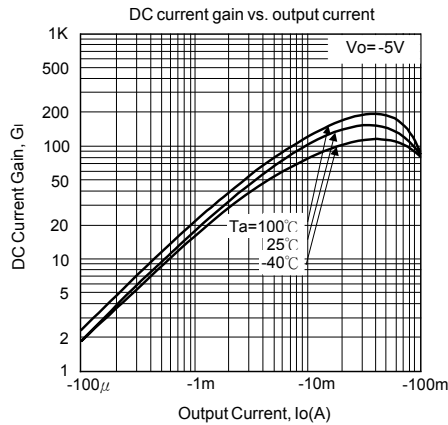
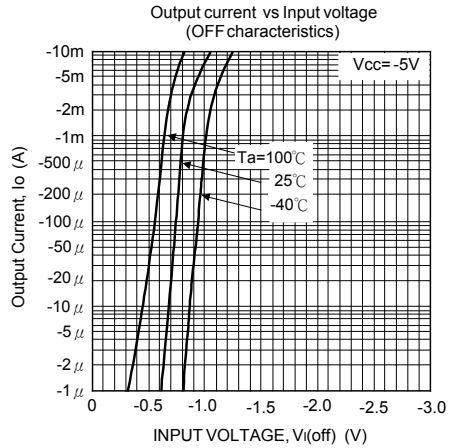
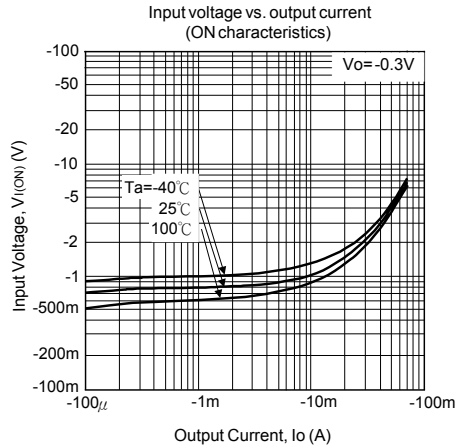
PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V _{CC}	-50	V
Input Voltage	V _{IN}	-12 ~ +5	V
Output Current	I _O	-100	mA
	I _{C(max)}	-100	
Power Dissipation	P _D	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Voltage	V _{I(off)}	V _{CC} = -5V, I _O =-100 μA			-0.3	V
	V _{I(on)}	V _O = -0.3V, I _O = -20mA	-3			
Output Voltage	V _{O(on)}	I _O /I _I = -10mA / -0.5 mA			-0.3	V
Input Current	I _I	V _I = -5V			-3.8	mA
Output Current	I _{O(off)}	V _{CC} = -50V, V _I =0V			-0.5	μA
DC Current Gain	G _I	V _O = -5V, I _O = -10mA	33			
Input Resistance	R ₁		1.54	2.2	2.86	kΩ
Resistance Ratio	R ₂ /R ₁		3.6	4.5	5.5	
Transition Frequency	f _T	V _{CE} = -10 V, I _E = 5mA, f=100MHz*		250		MHz

*Transition frequency of the device

ELECTRICAL CHARACTERISTIC CURVES



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