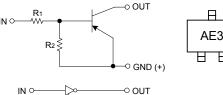
# PNP DIGITAL TRANSISTOR (BUILT-IN RESISTORS)

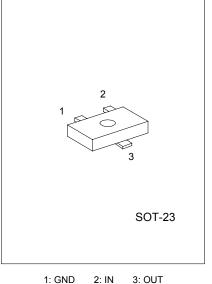
### **FEATURES**

- \*Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors (see the 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.









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## ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT	
Supply Voltage	Vcc	-50	V	
Input Voltage	VIN	-30~+10	V	
Output Current	lo	-100	mA	
	IC(max)	-100		
Power Dissipation	PD	200	mW	
Junction Temperature	Tj	150	°C	
Storage Temperature	Tstg	-55 ~ +150	°C	

## ELECTRICAL CHARACTERISTICS (Ta=25°C,unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Voltage	VI(off)	Vcc= -5V,Io=-100 μ A			-0.5	V
	VI(ON)	Vo= -0.3V,Io= -20mA	-3			
Output Voltage	VO(ON)	Io/I <sub>I</sub> = -10mA / -0.5 mA		-0.1	-0.3	V
Input Current	li	VI= -5V			-1.8	mA
Output Current	I <sub>O</sub> (off)	Vcc= -50V, Vi=0V			-0.5	$\mu A$
DC Current Gain	Gı	Vo= -5V,I <sub>O</sub> = -10mA	20			
Input Resistance	R <sub>1</sub>		3.29	4.7	6.11	kΩ
Resistance Ratio	R <sub>2</sub> /R <sub>1</sub>		0.8	1	1.2	
Transition Frequency	fτ	VcE= -10 V, IE= 5mA, f=100MHz *		250		MHz

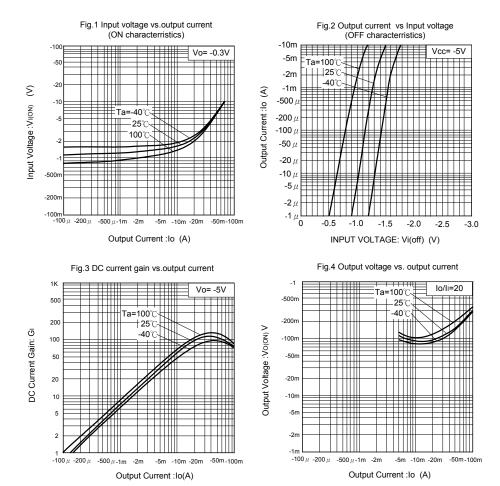
<sup>\*</sup>Transition frequency of the device



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#### **ELECTRICAL CHARACTERISTIC CURVES**



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