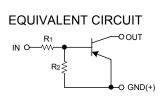
## PNP DIGITAL TRANSISTOR (BUILT-IN RESISTORS)

#### **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.

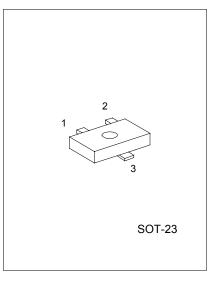
  \* Only the on/off conditions need to be set for operation,
- making device design easy.





**MARKING** 





1: GND 2: IN 3: OUT

# ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

PARAMETER	SYMBOL	RATINGS	UNIT	
Supply voltage	Vcc	-50	V	
Input voltage	Vı	-40 ~ +6	V	
Output current	lo	-70	mA	
	IC (Max.)	-100		
Power Dissipation	PD	200	mW	
Junction temperature	Tj	150	$^{\circ}$	
Storage temperature	Tstg	-55 ~ +150	$^{\circ}$	

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input voltage	VI (off)	Vcc=-5V, Io=-100 μ A			-0.3	V
	VI (on)	Vo=-0.3V, Io=-1mA	-1.4			V
Output voltage	Vo (on)	Io/II=-5mA/-0.25mA		-0.1	-0.3	V
Input current	lı	V <sub>I</sub> =-5V			-0.88	mA
Output current	IO (off)	Vcc=-50V, VI=0V			-0.5	$\mu A$
DC current gain	Gı	Vo=-5V, Io=-5mA	68			
Input resistance	R <sub>1</sub>		7	10	13	ΚΩ
Resistance ratio	R2/R1		3.7	4.7	5.7	
Transition frequency	f⊤	Vc=-10V, I=5mA, f=100MHz *		250		MHz

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

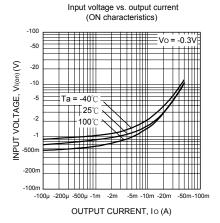


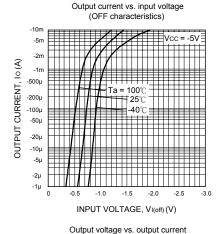
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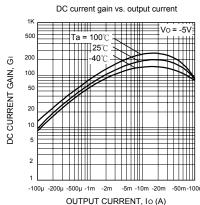
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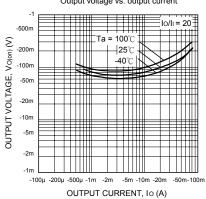
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#### **ELECTRICAL CHARACTERISTIC CURVES**









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