## UTC DTA115E

# PNP DIGITAL TRANSISTOR

## PNP DIGITAL TRANSISTOR (BUILT-IN RESISTORS)

### FEATURES

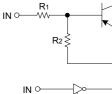
- \*Built-in bias resistors enable the configuration of an inverter circuit without connecting external input
- resistors (see the equivalent circuit). \*The bias resistors consist of thin-film resistors with
- complete isolation to allow positive biasing of the input They also have the advantage of almost completely eliminating parasitic effects.
- \*Only the on / off conditions need to be set for operation, making device design easy.

-0 OUT

#### EQUIVALENT CIRCUIT

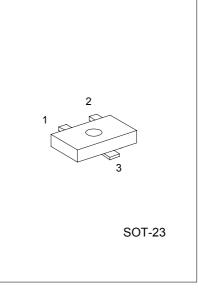


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AB5





1: GND 2: IN 3: OUT

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

	100(1a-250)			
PARAMETER	SYMBOL	RATINGS	UNIT	
Supply Voltage	Vcc	-50	V	
Input Voltage	VIN	-40~+10	V	
Output Current	lo	-20	mA	
	lc(max)	-100	IIIA	
Power Dissipation	PD	200	mW	
Junction Temperature	Tj	150	°C	
Storage Temperature	Tstg	-55 ~ +150	۵°	

#### 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= -1mA	-3			
Output Voltage	VO(ON)	Io= -5mA, II= -0.25 mA		-0.1	-0.3	V
Input Current	li li	VI= -5V			-0.15	mA
Output Current	I <sub>O</sub> (off)	Vcc= -50V , VI=0V			-0.5	$\mu A$
DC Current Gain	Gı	Vo= -5V,I <sub>0</sub> = -5mA	82			
Input Resistance	R1		70	100	130	kΩ
Resistance Ratio	R2/R1		0.8	1	1.2	
Transition Frequency	fτ	Vce= -10 V, Ie= 5mA, f=100MHz *		250		MHz

\*Transition frequency of the device

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QW-R206-056,A

# PNP DIGITAL TRANSISTOR

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