

UTC UNISONIC TECHNOLOGIES CO.,

DTA115E

PNP EPITAXIAL SILICON TRANSISTOR

PNP DIGITAL TRANSISTOR (BUILT-IN RESISTORS)

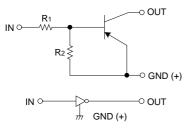
FEATURES

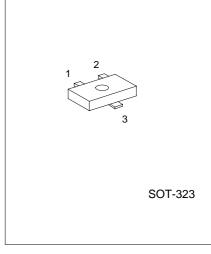
*Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors (see the equivalent circuit).

*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.

EQUIVALENT CIRCUIT





*Pb-free plating product number:DTA115EL

PIN CONFIGURATION

PIN NO.	PIN NAME
1	GND
2	IN
3	OUT

ORDERING INFORMATION

Order Number		Package	Packing	
Normal	Lead free	Fackage	Facking	
DTA115E-AL3-R	DTA115EL-AL3-R	SOT-323	Tape Reel	

MARKING



■ ABSOLUATE MAXIUM RATINGS (Ta = 25°C)

PARAMETER	SYMBOL	RATINGS	UNIT	
Supply Voltage	Vcc	-50	V	
Input Voltage	V _{IN} -40~+10		V	
Output Current	IOUT	-20		
	I _{c(max)}	-100	mA	
Power Dissipation	PD	200	mW	
Junction Temperature	TJ	150	°C	
Storage Temperature	T _{STG}	-40 ~ +150	°C	

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Voltage	V _{IN(off)}	V _{CC} = -5V, I _{OUT} =-100 μ A			-0.5	V
	V _{IN(ON)}	V _{OUT} = -0.3V,I _{OUT} = -1mA	-3			V
Output Voltage	V _{OUT(ON)}	I _{OUT} = -5mA, I _{IN} = -0.25 mA		-0.1	-0.3	V
Input Current	I _{IN}	V _{IN} = -5V			-0.15	mA
Output Current	I _{OUT(off)}	V _{CC} = -50V , V _{IN} =0V			-0.5	μA
DC Current Gain	Gı	V _{OUT} = -5V,I _{OUT} = -5mA	82			
Input Resistance	R ₁		70	100	130	kΩ
Resistance Ratio	R_2/R_1		0.8	1	1.2	
Transition Frequency	f⊤	V _{CE} = -10 V, I _E = 5mA, f=100MHz *		250		MHz

*Transition frequency of the device

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.

