

UTC UNISONIC TECHNOLOGIES CO., LTD

## **DTA114T**

### **PNP SILICON TRANSISTOR**

3

## **DIGITAL TRANSISTORS** (BUILT- IN BIAS RESISTORS)

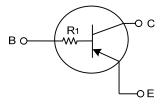
#### **FEATURES**

\* Built-in bias resistors that implies easy ON/OFF applications.

\* The bias resistors are thin-film resistors with complete isolation to allow positive input.

# SOT-23 SOT-323 SOT-523

#### EQUIVALENT CIRCUIT



\*Pb-free plating product number:DTA114TL

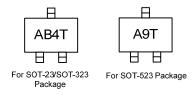
ww.DataSheet4U.com

#### ORDERING INFORMATION

Order Number		Deekege	Pin Assignment			Deaking	
Normal	Lead Free Plating	Package	1	2	3	Packing	
DTA114T-AE3-R	DTA114TL-AE3-R	SOT-23	Е	В	С	Tape Reel	
DTA114T-AL3-R	DTA114TL-AL3-R	SOT-323	E	В	С	Tape Reel	
DTA114T-AN3-R	DTA114TL-AN3-R	SOT-523	Е	В	С	Tape Reel	

DTA114TL-AE3-R		
	(1)Packing Type	(1) R: Tape Reel
(	(2)Package Type	(2) AE3: SOT-23, AL3: SOT-323, AN3: SOT-523
	(3)Lead Plating	(3) L: Lead Free Plating, Blank: Pb/Sn

#### MARKING



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

PARAMETER		SYMBOL	RATING	UNIT
Collector-Base Voltage		V <sub>CBO</sub>	-50	V
Collector-Emitter Voltage		V <sub>CEO</sub>	-50	V
Emitter-Base Voltage		$V_{\text{EBO}}$	-5	V
Collector Current		lc	-100	mA
Collector Power Dissipation	SOT-23		200	mW
	SOT-323/SOT-523	Pc -	150	mW
Junction Temperature		TJ	+150	°C
Storage Temperature		T <sub>STG</sub>	-55~+150	°C

Note Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

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

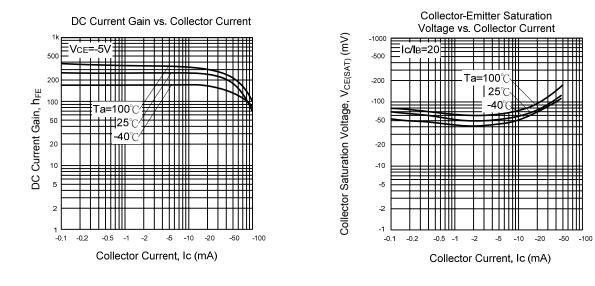
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$BV_{CBO}$	Ι <sub>C</sub> =-50μΑ	-50			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	I <sub>C</sub> =-1mA	-50			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	Ι <sub>Ε</sub> =-50μΑ	-5			V
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>C</sub> =-10mA, I <sub>B</sub> =-1mA			-0.3	V
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =-50V			-0.5	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =-4V			-0.5	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> =-1mA	100	250	600	
Input Resistance	R <sub>1</sub>		7	10	13	kΩ
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> =-10V, I <sub>E</sub> =5mA, f=100MHz*		250		MHz

\* Transition frequency of the device



# DTA114T

## TYPICAL CHARACTERISTICS



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