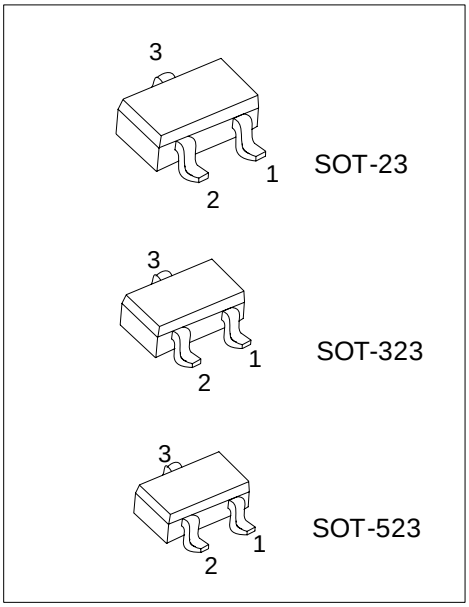
DTA143T

PNP SILICON TRANSISTOR

DIGITAL TRANSISTORS (BUILT- IN BIAS RESISTORS)

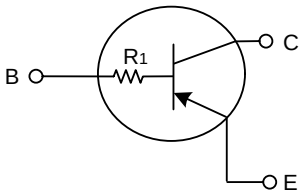


* Pb-free plating product number: DTA143TL

■ 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.

■ EQUIVALENT CIRCUIT



■ ORDERING INFORMATION

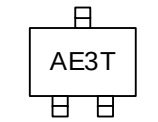
Order Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
DTA143T-AE3-R	DTA143TL-AE3-R	SOT-23	E	B	C	Tape Reel
DTA143T-AL3-R	DTA143TL-AL3-R	SOT-323	E	B	C	Tape Reel
DTA143T-AN3-R	DTA143TL-AN3-R	SOT-523	E	B	C	Tape Reel

DTA143TL-AE3-R

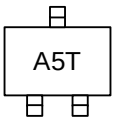
(1)Packing Type
(2)Package Type
(3)Lead Plating

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

■ MARKING



For SOT-23/SOT-323 Package



For SOT-523 Package

Copyright © 2005 Unisonic Technologies Co., Ltd

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C , unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage		V_{CBO}	-50	V
Collector-Emitter Voltage		V_{CEO}	-50	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current		I_C	-100	mA
Collector Power Dissipation	SOT-523	P_C	150	mW
	SOT-23/SOT-323		200	mW
Junction Temperature		T_J	+150	℃
Storage Temperature		T_{STG}	-55~+150	℃

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.

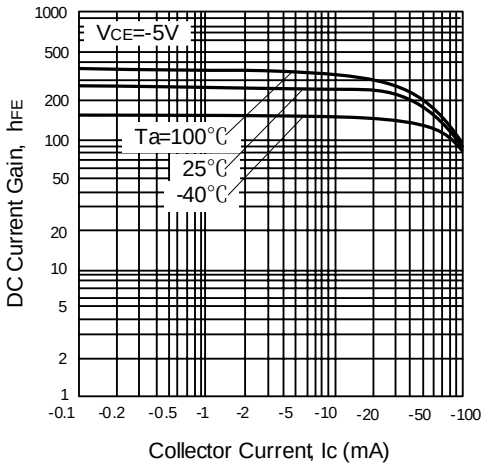
■ ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	BV_{CBO}	I_C=-50 μ A	-50			V
Collector-emitter breakdown voltage	BV_{CEO}	I_C=-1mA	-50			V
Emitter-base breakdown voltage	BV_{EBO}	I_E=-50 μ A	-5			V
Collector cutoff current	I_{CBO}	V_{CB}=-50V			-0.5	μ A
Emitter cutoff current	I_{EBO}	V_{EB}=-4V			-0.5	μ A
Collector-emitter saturation voltage	$V_{CE(SAT)}$	I_C=-5mA, I_B= -0.25mA			-0.3	V
DC Current Gain	h_{FE}	V_{CE}=-5V, I_C= -1mA	100	250	600	
Input resistance	R_1		3.29	4.7	6.11	kΩ
Transition frequency	f_T	V_{CE}=-10V, I_E=5mA, f=100MHz *		250		MHz

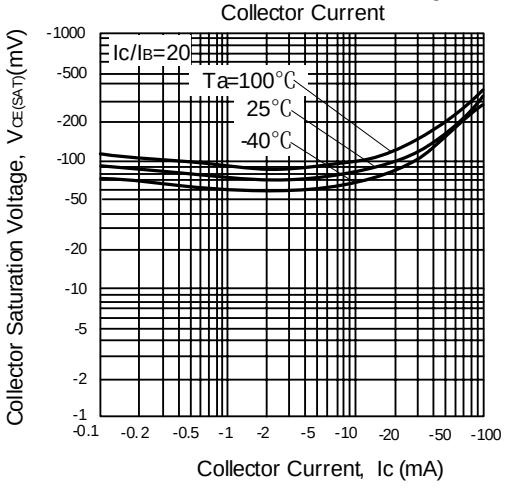
* Transition frequency of the device

■ TYPICAL CHARACTERISTICS

DC Current Gain vs. Collector Current



Collector-Emitter Saturation Voltage vs. Collector Current



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.