



## DTA144T

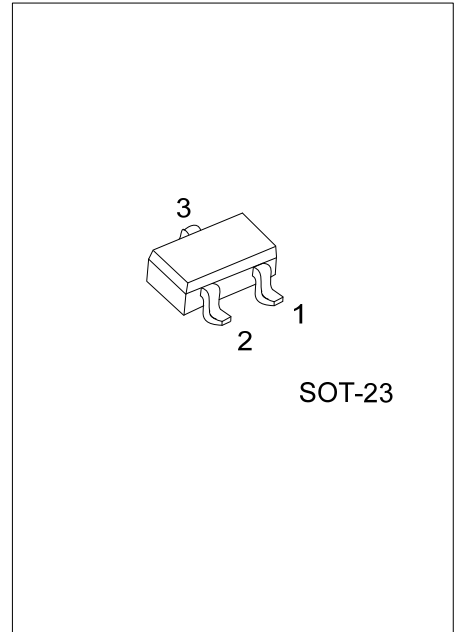
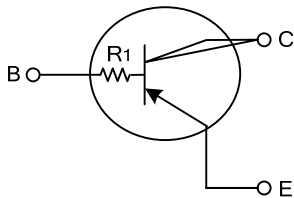
## PNP SILICON TRANSISITOR

### PNP DIGITAL TRANSISTOR (BUILT-IN RESISTOR)

#### ■ 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



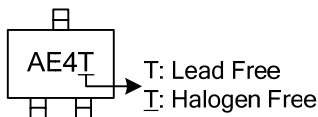
#### ■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
DTA144TL-AE3-R	DTA144TG-AE3-R	SOT-23	E	B	C	Tape Reel

Note: Pin Assignment: B: Base C: Collector E: Emitter

DAT144TL-AE3-R 	(1) R: Tape Reel (2) AE3: SOT-23 (3) G: Halogen Free, L: Lead Free
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#### ■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V <sub>CBO</sub>	-50	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-50	V
Emitter-Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current	I <sub>C</sub>	-100	mA
Collector Power Dissipation	P <sub>c</sub>	200	mW
Junction Temperature	T <sub>J</sub>	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.

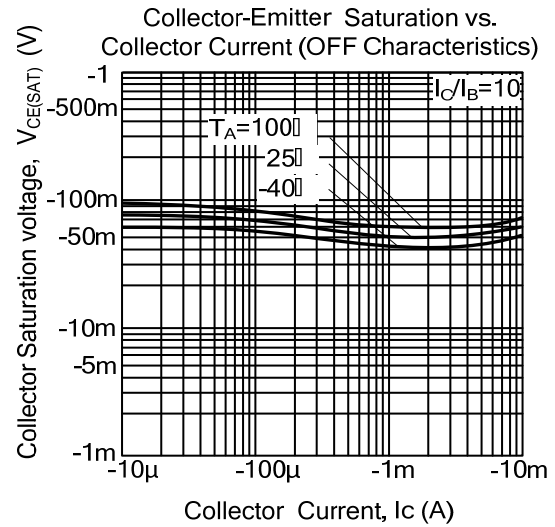
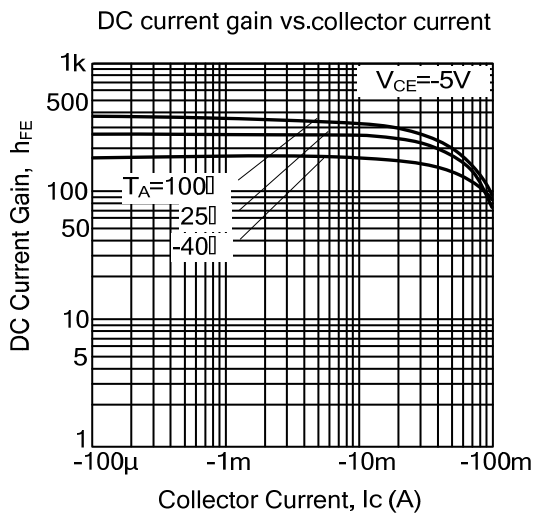
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub> =25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV <sub>CBO</sub>	I <sub>C</sub> =-50μA	-50			V
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>C</sub> =-1mA	-50			V
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	I <sub>E</sub> =-50μA	-5			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
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>C</sub> =-5mA, I <sub>B</sub> = -0.5mA			-0.3	V
DC Current Transfer Ratio	h <sub>FE</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> = -1mA	100	250	600	
Transition Frequency (Note)	f <sub>T</sub>	V <sub>CE</sub> =-10V, I <sub>E</sub> =5mA, f=100MHz		250		MHz
Input Resistance	R <sub>1</sub>		32.9	47	61.1	kΩ

Note: Transition frequency of the device

■ TYPICAL CHARACTERISTICS



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