



DTA144T

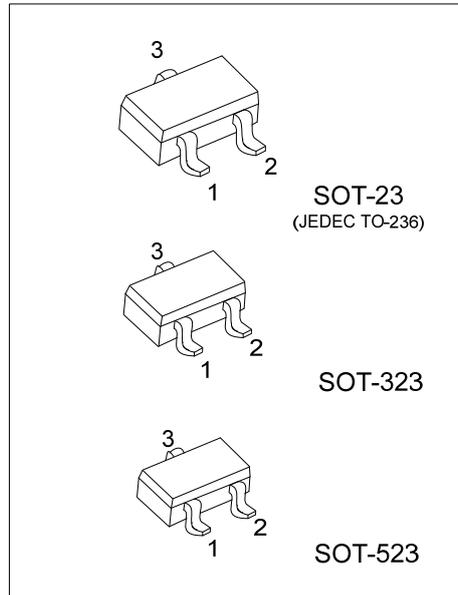
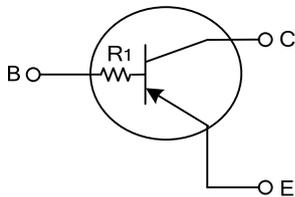
PNP SILICON TRANSISITOR

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



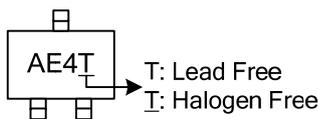
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
DTA144TL-AE3-R	DTA144TG-AE3-R	SOT-23	B	E	C	Tape Reel
DTA144TL-AL3-R	DTA144TG-AL3-R	SOT-323	B	E	C	Tape Reel
DTA144TL-AN3-R	DTA144TG-AN3-R	SOT-523	B	E	C	Tape Reel

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

DTA144TG-AE3-R	(1)Packing Type	(1) R: Tape Reel
	(2)Package Type	(2) AE3: SOT-23, AL3: SOT-323, AN3: SOT-523
	(3)Green Package	(3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$, 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	P_C	200	mW
Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ\text{C}$

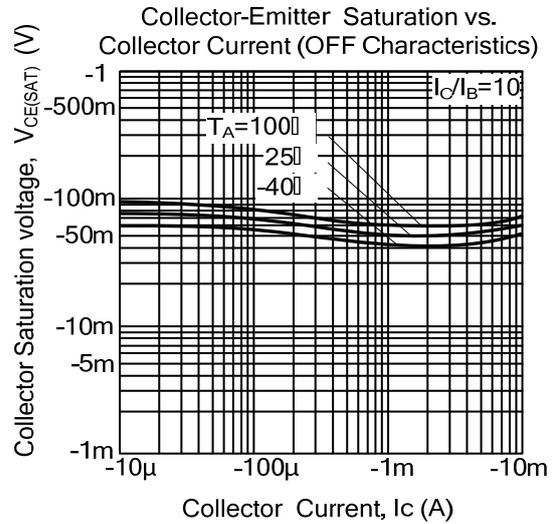
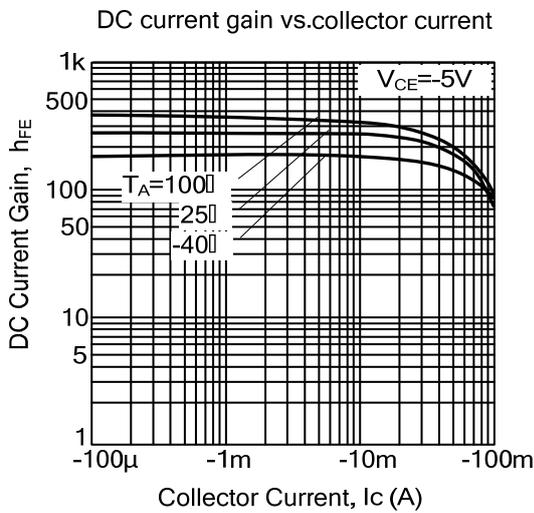
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -50\mu\text{A}$	-50			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -1\text{mA}$	-50			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -50\mu\text{A}$	-5			V
Collector Cutoff Current	I_{CBO}	$V_{CB} = -50\text{V}$			-0.5	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -4\text{V}$			-0.5	μA
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -5\text{mA}, I_B = -0.5\text{mA}$			-0.3	V
DC Current Transfer Ratio	h_{FE}	$V_{CE} = -5\text{V}, I_C = -1\text{mA}$	100	250	600	
Transition Frequency (Note)	f_T	$V_{CE} = -10\text{V}, I_E = 5\text{mA}, f = 100\text{MHz}$		250		MHz
Input Resistance	R1		32.9	47	61.1	k Ω

Note: Transition frequency of the device.

■ TYPICAL CHARACTERISTICS



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