



DTA114T

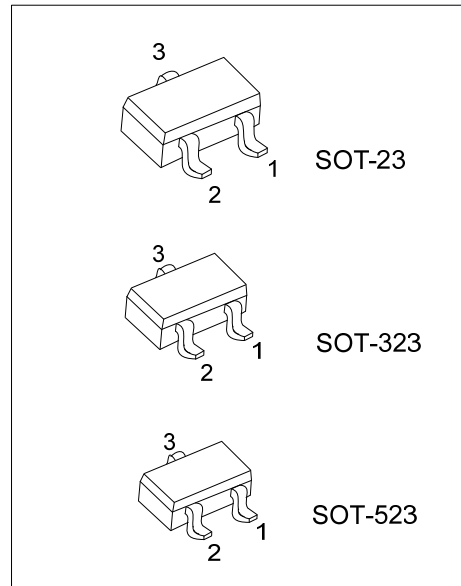
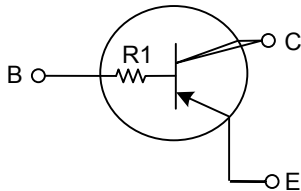
PNP SILICON TRANSISTOR

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.

■ EQUIVALENT CIRCUIT

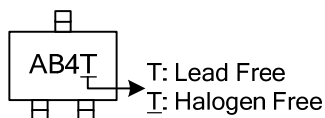


■ ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
DTA114TL-AE3-6-R	DTA114TG-AE3-6-R	SOT-23	E	B	C	Tape Reel
DTA114TL-AL3-6-R	DTA114TG-AL3-6-R	SOT-323	E	B	C	Tape Reel
DTA114TL-AN3-6-R	DTA114TG-AN3-6-R	SOT-523	E	B	C	Tape Reel

<p>DTA114TL-AE3-6-R</p> <p>(1)Packing Type (2)Pin Assignment (3)Package Type (4)Lead Free</p>	<p>(1) R: Tape Reel (2) refer to Pin Assignment (3) AE3: SOT-23, AL3: SOT-323, AN3: SOT-523 (4) G: Halogen Free, L: Lead Free</p>
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■ MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

PARAMETER	SYMBOL	RATING	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-23	200	mW
	SOT-323/SOT-523	150	
Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~+150	$^\circ\text{C}$

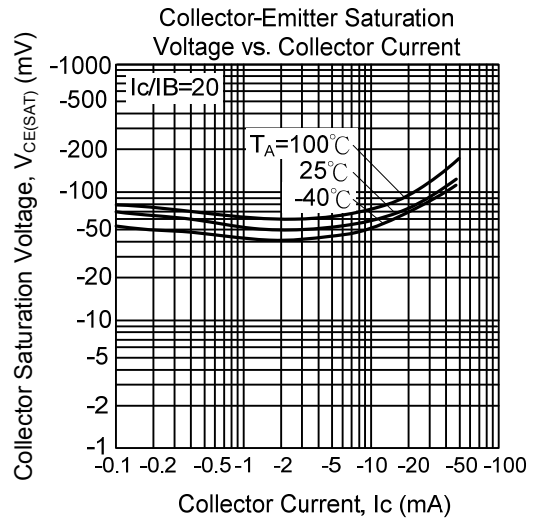
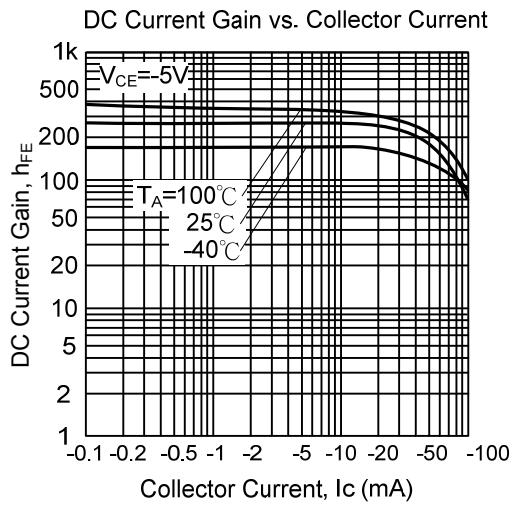
Note Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ 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-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$			-0.3	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
DC Current Gain	h_{FE}	$V_{CE} = -5\text{V}, I_C = -1\text{mA}$	100	250	600	
Input Resistance	R_1		7	10	13	k Ω
Transition Frequency	f_T	$V_{CE} = -10\text{V}, I_E = 5\text{mA}, f = 100\text{MHz}$ (Note)		250		MHz

Note: Transition frequency of the device

■ TYPICAL CHARACTERISTICS



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