



DTA114T

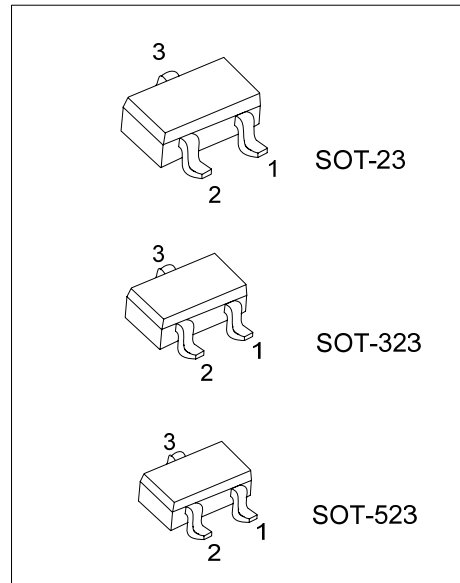
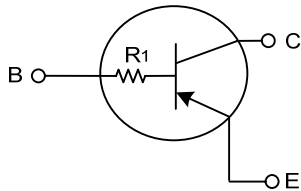
PNP SILICON TRANSISTOR

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



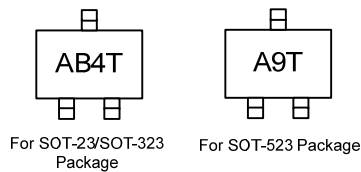
*Pb-free plating product number:DTA114TL

ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
DTA114T-AE3-R	DTA114TL-AE3-R	SOT-23	E	B	C	Tape Reel
DTA114T-AL3-R	DTA114TL-AL3-R	SOT-323	E	B	C	Tape Reel
DTA114T-AN3-R	DTA114TL-AN3-R	SOT-523	E	B	C	Tape Reel

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



■ ABSOLUTE MAXIMUM RATINGS (Ta = 25°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	P_C	200	mW
	SOT-323/SOT-523		150	mW
Junction Temperature		T_J	+150	°C
Storage Temperature		T_{STG}	-55~+150	°C

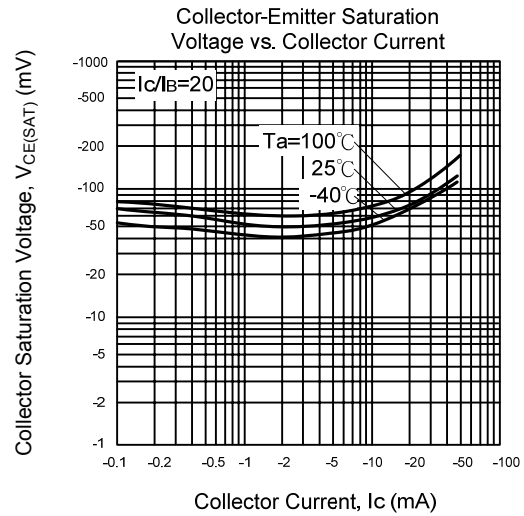
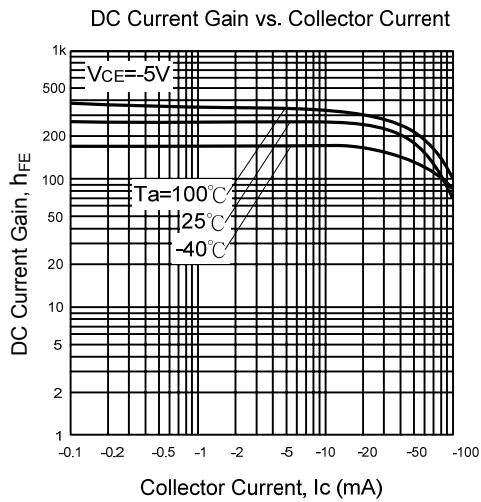
Note Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -50\mu A$	-50			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -1mA$	-50			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -50\mu A$	-5			V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -10mA, I_B = -1mA$			-0.3	V
Collector Cutoff Current	I_{CBO}	$V_{CB} = -50V$			-0.5	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -4V$			-0.5	μA
DC Current Gain	h_{FE}	$V_{CE} = -5V, I_C = -1mA$	100	250	600	
Input Resistance	R_1		7	10	13	k Ω
Transition Frequency	f_T	$V_{CE} = -10V, I_E = 5mA, f = 100MHz^*$		250		MHz

* Transition frequency of the device

■ TYPICAL CHARACTERISTICS



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