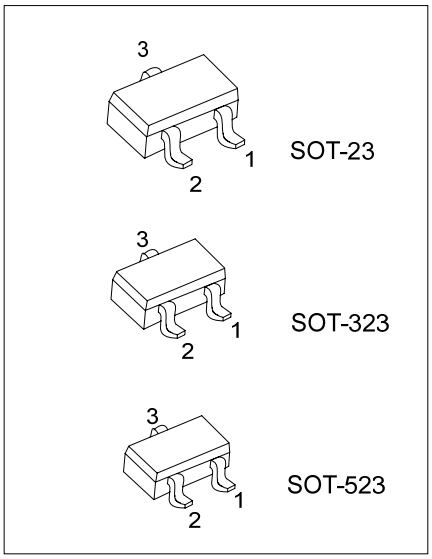
DTA114T

PNP SILICON TRANSISTOR

DIGITAL TRANSISTORS (BUILT- IN BIAS RESISTORS)

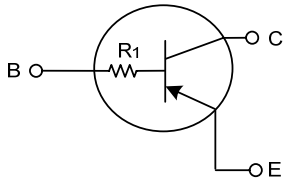


*Pb-free plating product number:DTA114TL

■ 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

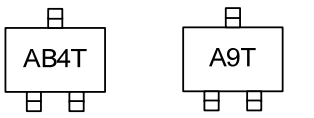
Order Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
DTA114T-AE3-R	DTA114TL-AE3-R	SOT-23	E	B	C	Tape Reel
DTA114T-AL3-R	DTA114TL-AL3-R	SOT-323	E	B	C	Tape Reel
DTA114T-AN3-R	DTA114TL-AN3-R	SOT-523	E	B	C	Tape Reel

DTA114TL-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

■ ABSOLUTE MAXIMUM RATINGS (Ta = 25℃)

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	℃
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℃, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=-50μA	-50			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=-1mA	-50			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=-50μA	-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	kΩ
Transition Frequency	f_T	V_{CE}=-10V, I_E=5mA, f=100MHz*		250		MHz

* Transition frequency of the device

■ TYPICAL CHARACTERISTICS