



DTA143T

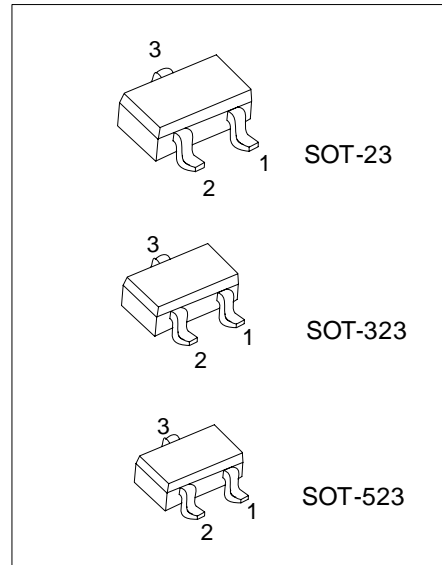
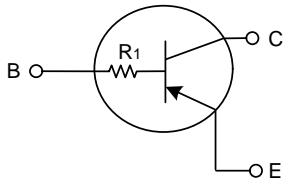
PNP SILICON TRANSISTOR

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



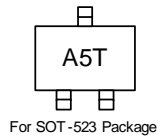
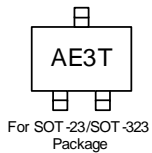
* Pb-free plating product number: DTA143TL

ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
DTA143T-AE3-R	DTA143TL-AE3-R	SOT-23	E	B	C	Tape Reel
DTA143T-AL3-R	DTA143TL-AL3-R	SOT-323	E	B	C	Tape Reel
DTA143T-AN3-R	DTA143TL-AN3-R	SOT-523	E	B	C	Tape Reel

DTA143TL-AE3-R	(1)Packing Type	(1) R: Tape Reel
	(2)Package Type	(2) AE3: SOT-23, AL3: SOT-323, AN3: SOT-523
	(3)Lead Plating	(3) L: Lead Free Plating, Blank: Pb/Sn

MARKING



■ ABSOLUTE MAXIMUM RATINGS (Ta=25°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	SOT-523	P_C	150	mW
	SOT-23/SOT-323		200	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.

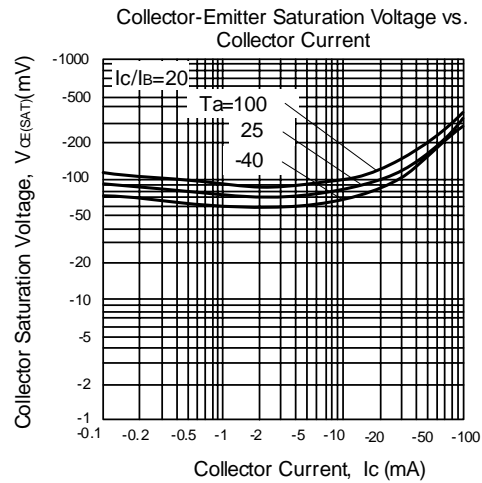
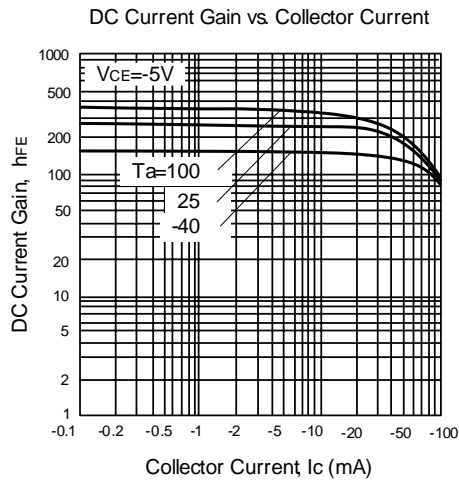
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (Ta=25°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 cutoff current	I_{CBO}	$V_{CB} = -50V$			-0.5	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4V$			-0.5	μA
Collector-emitter saturation voltage	$V_{CE(SAT)}$	$I_C = -5mA, I_B = -0.25mA$			-0.3	V
DC Current Gain	h_{FE}	$V_{CE} = -5V, I_C = -1mA$	100	250	600	
Input resistance	R_1		3.29	4.7	6.11	k
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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