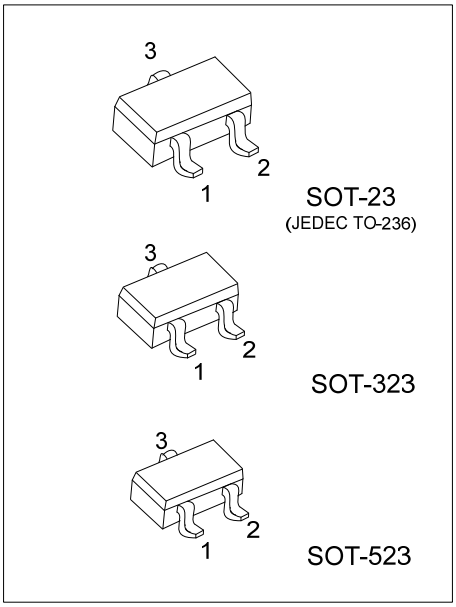
DTA144T

PNP SILICON TRANSISITOR

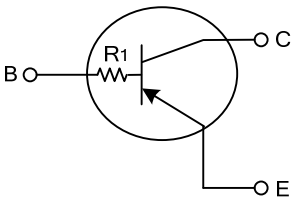
PNP DIGITAL TRANSISTOR (BUILT-IN RESISTOR)



■ 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



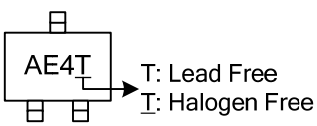
■ ORDERING INFORMATION

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

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A =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	P_C	200	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 (T_A =25°C, 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 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= -0.5mA			-0.3	V
DC Current Transfer Ratio	h_{FE}	V_{CE} =-5V, I_C= -1mA	100	250	600	
Transition Frequency (Note)	f_T	V_{CE}=-10V, I_E=5mA, f=100MHz		250		MHz
Input Resistance	R1		32.9	47	61.1	kΩ

Note: Transition frequency of the device.

■ TYPICAL CHARACTERISTICS