



# DTA113T

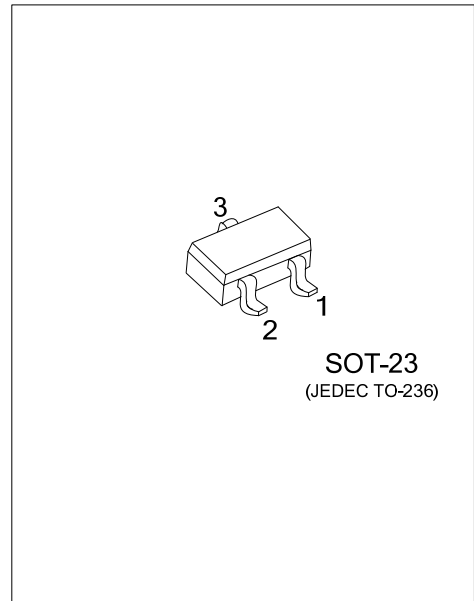
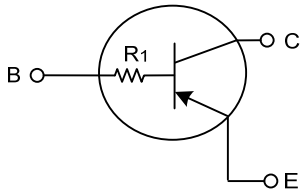
## PNP SILICON TRANSISTOR

### PNP DIGITAL TRANSISTOR (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



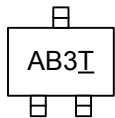
■ ORDERING INFORMATION

Ordering Number	Package	Pin Assignment			Packing
		1	2	3	
DTA113TG-AE3-R	SOT-23	E	B	C	Tape Reel

Note: Pin assignment: E: Emitter    B: Base    C: Collector

<p>DTA113TG-AE3-R</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Green Package</li> </ul>	<ul style="list-style-type: none"> <li>(1) R: Tape Reel</li> <li>(2) AE3: SOT-23</li> <li>(3) G: Halogen Free and Lead Free</li> </ul>
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■ MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	$V_{CBO}$	-50	V
Collector-Emitter Voltage	$V_{CEO}$	-50	V
Emitter-Base Voltage	$V_{EBO}$	-6	V
Collector Current	$I_C$	-100	mA
Peak Collector Current	$I_{CM}$	-200	mA
Collector Power Dissipation	$P_C$	150	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55~+150	$^\circ\text{C}$

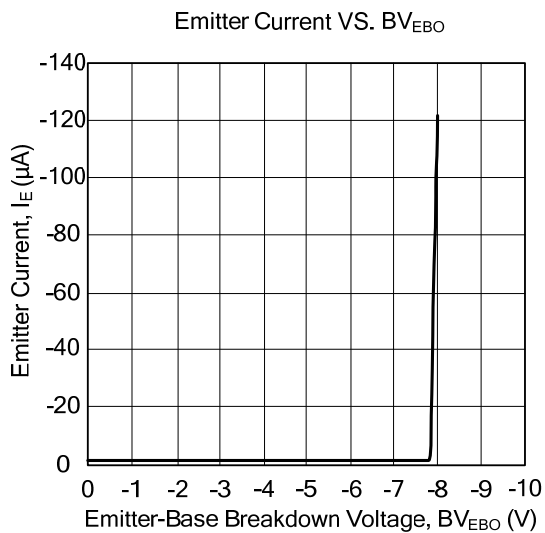
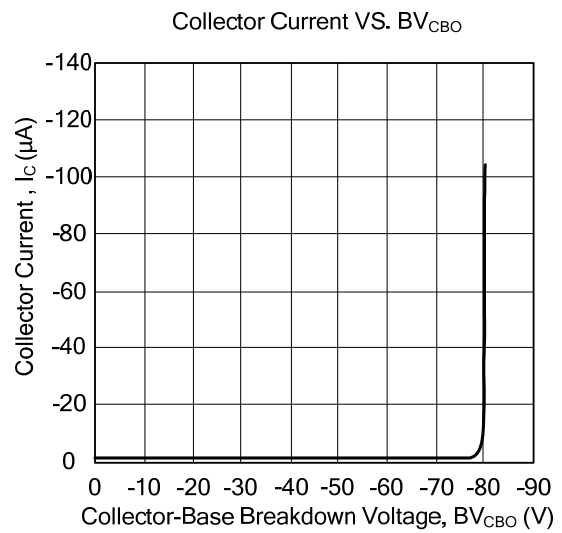
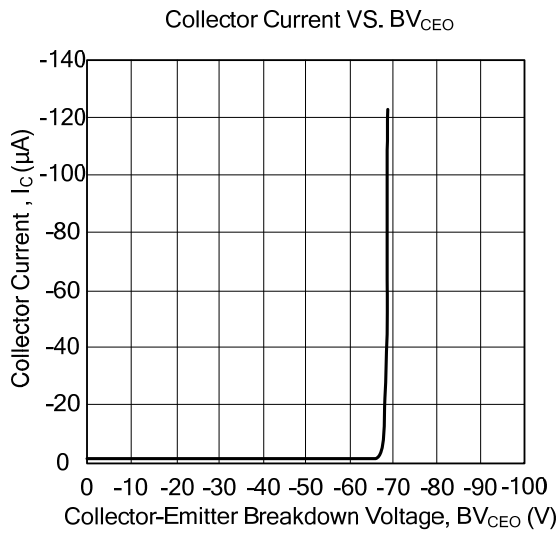
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

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-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=-100\mu\text{A}$ , $R_{BE}=\infty$	-50			V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=-10\text{mA}$ , $I_B=-0.5\text{mA}$			-0.3	V
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=-50\text{V}$ , $I_E=0$			-0.1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=-5\text{V}$ , $I_C=-1\text{mA}$	100			
Input Resistance	$R_{IN}$		0.7	1.0	1.3	$\text{k}\Omega$
Current Gain Bandwidth Product	$f_T$	$V_{CE}=-6\text{V}$ , $I_E=10\text{mA}$		150		MHz

### ■ TYPICAL CHARACTERISTICS



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